The Political Conditioning of Economic Perceptions: Evidence from the 1992-97 British Electoral Cycle

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Abstract

Economic theories of voting argue that party popularity and vote are heavily influenced by the performance of the economy. Research supporting these theories typically employs cross-sectional data, however, making inferences about causal direction questionable. This paper evaluates the micro-foundations of economic theories of voting and party popularity using extensive panel data. We explore the dynamic relationships between party support and retrospective economic perceptions—both egocentric and sociotropic—through the 1992-97 British electoral cycle. Our findings suggest that sociotropic economic perceptions were strongly conditioned by prior opinions of the incumbent Conservative Party. More importantly, once their temporal relationship is taken into account, sociotropic economic perceptions only weakly effect incumbent party popularity. Retrospective egocentric economic perceptions, on the other hand, appear to neither affect nor be influenced by party support. These findings indicate that cross-sectional models are likely to overstate the importance of economic considerations for voting.

Proponents of economic voting models argue that economic performance, or at least voters' perceptions of the economy, provides a central explanation of electoral change. As a recent comprehensive review concludes:

> "The powerful relationship between the economy and the electorate in democracies the world over comes from the economic responsiveness of the electors, the individual voters. Among the issues on the typical voter's agenda, none are more consistently present, nor generally has a stronger impact, than the economy. Citizen dissatisfaction with economic performance substantially increases the probability of a vote against the incumbent." (Lewis-Beck and Stegmaier 2000: 211).

An opposing view treats economic perceptions as endogenous variables and proposes that the public's grasp of economic performance is generally weak and strongly influenced by other aspects of its political belief systems. In this view, one's political orientation influences how one responds to questions about the performance of the economy. In other words, the causal arrow between the economy and politics is reversed.

The mechanisms through which political beliefs might impact economic perceptions are likely to be various: an expression of partisan loyalty, cognitive consistency needs or simply a desire to maintain the appearance of consistency in the interview context, are all possibilities. More importantly, it could derive from the role of the party as a source of trusted information on the basis of which people assess the economy. Some, if not all, of these mechanisms are present in Campbell et al's (1960) influential notion of the party as a filter through which economic performance is assessed. They state 'Identification with a party raises a perceptual screen through which the individual tends to see what is favourable to his partisan orientation' (Cambell *et al* 1960: 133).

It is reasonable to suggest that a disastrous economy — such as those in some transition societies — would elicit shared and reasonably perceptive responses that are less affected by political re-interpretation. On the other hand, partisan 'contamination' of voters' understanding of economic performance is less likely to occur when the economy is relatively stable, as is generally the case in western democracies. In such cases yearly changes in economic performance are typically not distinctive enough to produce a shared, accurate assessment of how the economy is doing. To the extent that they are not simply random 'non-attitudes' presented to appease interviewers, perceptions of the economy are more likely to reflect other influences. Some of these influences derive from differences in vulnerability to economic events that result from resource differences. For example, income, employment status, and social class, are all likely to condition variation in economic perceptions and associated political responses within the electorate (i.e. Weatherford, 1978; Duch, Palmer and Anderson, 2000). Moreover, in the absence of very strong and unavoidable cues from the economy itself, political orientation potentially provides a major source of response variation.

The significance of this process for economic models is apparent. Although it is obvious that *objective* economic changes (in GDP *per capita* for example) are exogenous –i.e., they are not just constructs in voters' minds, so that the psychological predisposition to support a given party cannot make GDP *per capita* increase—these objective indicators often fail to predict government popularity in a clearly predictable or interpretable way. Not surprisingly, then, many proponents of economic voting tend to focus on subjective assessments of the economy.[1] If these subjective assessments are influenced by the very phenomena they are assumed to effect—partisan attitudes--their impact will be over-estimated if this reciprocal relationship is not taken into account. In other words, it is important to determine the extent to which economic perceptions are influenced by prior partisan attitudes.

Despite these concerns, the influence of political orientations on economic perceptions has been the focus of surprisingly little research. Conover, Feldman, and Knight's (1986; 1987) US study examined the impact of incumbent partisanship and appraisals of the parties' economic management on voters' perceptions of inflation and unemployment rates using a three-wave panel study over a relatively short one-year period. They found no evidence of partisanship effects and only minor effects of economic management competence. On the other hand, Wlezien, Franklin, and Twiggs' (1997) four-nation study of economic voting in Western Europe found that evaluations of the economy were, at least in part, predicted by vote intention. Their analysis also indicated that retrospective perceptions are more important than prospective ones. That even these effects were over-estimated is implied by the fact that several variables measuring government intervention in the economy were assumed to be exogenous even though it is highly likely that they are not. Wilcox and Wlezien (1996) likewise indicate the presence of endogeneity using a survey-experiment. Interesting though these findings are, they are limited in that they use cross-sectional data, meaning that they cannot realistically consider the possible influences of longer-term partisanship.[2]

This debate has also been prevalent in the context of British elections. Sanders and Price (1995; Sanders and Price 1995) used a pooled aggregate and individual-level analysis to argue that economic perceptions have strong effects on vote preference. On the other hand, Macdonald and Heath (Macdonald and Heath 1997) show that controlling for recalled vote substantially reduces the effects of economic perceptions on party support, indicating that prior partisanship does influence economic perceptions. Price and Sanders' response is that 'recalled vote is so seriously contaminated by current vote preference that it is simply not plausible to use it as a predictor of current vote without committing the most blatant act of tautology' (Price and Sanders 1997; 942).

These debates signal the necessity for measures of prior partisanship that are uncontaminated by current political position, something that is simply not possible without longitudinal data. As, Lewis-Beck & Stegmaier (2000: 195) argue "utilizing panel data to explore the temporal dynamic of individual economic voting seems the next frontier in US presidential survey studies." Nonetheless, to date there has been no research examining the endogeneity of economic perceptions using extended panel data covering a complete electoral cycle. The present paper begins to fill this gap by assessing the interplay between individual economic perceptions and party support during the entire 1992-97 electoral cycle using the 1992-97 British Election Panel Study (BEPS). We start by fitting standard models of Conservative vote and popularity regressed on contemporaneous economic perceptions in 1997. We compare these models with models including information about respondents in the 1992 election. We then present a final model that includes all five usable waves of the BEPS, allowing us to disentangle the complex temporal relations between economic perceptions and party support.

The 1992-97 British electoral cycle is an interesting case study for the economic model in that it saw a dramatic reversal in the fortunes of the incumbent Conservative Party during a period in which Britain's economy was performing quite well. This engendered much speculation and numerous studies of the aggregate relationship between government popularity, trends in the economy, and various political events during the period. Commentators attributed Labour's 'landslide' victory in 1997 to several factors, most of which were unrelated to the country's economic performance. These included image problems resulting from perceptions of sleaze and incompetence, especially the Government's mishandling of the ERM crisis (Sanders 1999a; Evans 1999), internal divisions within the Conservative Party over European integration (Evans 1998), the

emergence of Tony Blair as a charismatic leader, and general public with many years of Conservative government (Denver 1998).

Despite the failure of the performance of the macro-economy to adequately explain these marked short-term changes, the role of economic perceptions is generally still considered as important in explaining voting in the 1997 election. In journalistic as well as academic discussion emphasis has been put on the failure of a 'feel good' factor to emerge referred to as the "new climate of post-Thatcherite economic insecurity" (Sanders 1996: 223; see also Hutton 1995; Wickham-Jones 1997). According to this account, despite national aggregate economic improvements, many people still felt vulnerable: job insecurity; negative property equity; and uncertainty about the future all served to undermine the predictive power of models derived from the generally positive performance of the objective macro-economy while preserving a role for economic perceptions (Gavin and Sanders 1997). In addition, there is evidence of significant associations between perceptions of economic well-being (personal and national) and vote choice or government popularity during this period at both the aggregate and individual level (Sanders 1999; Pattie, Johnston and Sanders 1999). As Sanders (1996:223) states, "(v)oters' economic perceptions continue to be central to the political fortunes of the government" (see also Clarke, Stewart and Whiteley 1997).

In the present paper we hypothesize that taking the temporally-connected relationship between party support and economic perceptions into account drastically reduces the estimated effects of economic perceptions on party support. We also expect that economic perceptions are significantly influenced by party support. In other words, the direction of influence between economic perceptions and political preferences is disproportionately from politics to economics rather than *vice versa*. We examine this thesis with respect to perceptions not only of the macro-economy, for which it has most obvious implications, but also for perceptions of personal economic circumstances. We suspect that variations in the

latter are far less likely to be derived from political sources than are those that make reference to the state of the national economy. The sources of information on which judgments are made about personal economic circumstances are likely to be more immediate and more idiosyncratic than are those for perceptions of the national economy, which are therefore more likely to be conditioned by some approximation of Campbell et al's partisan 'perceptual screen'.

Data and Methods

Data

Our analyses rely on the British Election Panel Study (BEPS), which is extended from the 1992 British Election Study. Respondents who took part in the 1992 British Election cross-section survey were followed-up at regular intervals across the entire 1992 to 1997 electoral cycle. The initial sample size for BEPS was 3534 in 1992. As all of the relevant variables were not included in all waves of the BEPS, we restrict our final analysis to the face-to-face interview waves in 1992, 1994, 1995, 1996, and 1997, which obtained more extensive information from respondents than did the intervening telephone/postal waves. Our analyses pertain to respondents who participated in both the first and last wave of the panel, for an analytical sample size of 1694.[3]

Measurement

Economic Perceptions

Theories of economic voting differ in the importance that they attribute to various types of economic perceptions. One distinction is that between *personal* economic perceptions and perceptions of the state of the *national* economy – so called, 'egocentric' (or 'pocket-book') and 'sociotropic' models of voting. Another concerns the division between

retrospective and *prospective* models. In this analysis we restrict our focus to the retrospective perceptions that have formed the basis of influential models of subjective economic voting from Fiorina (1978, 1981) onwards - not least because prospective perceptions are likely to be particularly (and realistically) influenced by whether the party voted for wins the election.

Retrospective sociotropic economic perceptions were measured with the question: 'Looking back over the past year or so, would you say that Britain's economy has got stronger, got weaker, or stayed the same?' Got a lot weaker (1); got a little weaker (2); stayed the same (3); got a little stronger (4); got a lot stronger (5).

Retrospective egocentric perceptions were measured with the question: 'In the past year, would you say that your household income kept up with prices?' Income was a lot lower than prices (1); income was a little lower than prices (2); income kept up with prices (3); income was a little higher than prices (4); income was much higher than prices (5).

Political indicators

Our main analysis uses party popularity as the main outcome variable, but we also explore models of vote because of the popularity of vote choice as a dependent variable. Nonetheless, vote is likely to be a proxy for, or a consequence of, other factors – in particular, partisanship and related attitudes towards a party. Considering that such partisan attitudes are related to vote choice and may also be correlated with economic perceptions, the relationship between prior political affiliations and current economic evaluations is likely to be best measured using an indicator of party support rather then vote per se. This is especially the case when assessing party support outside of electoral periods when vote is less meaningful.

It also removes the contaminating effects of strategic voting, a factor of some significance in both the 1992 and the 1997 elections. (Evans 1994; Evans, Curtice and Norris 1998).

Incumbent Vote. In the 1992 and 1997 surveys respondents were asked: "What party did you vote for in the general election?" This variable was coded so that 1 = a vote for the Conservative Party and 0 = all other responses. We focus on voting for or against the incumbent, so we combine non-Conservative voting respondents into an 'other' category. This decision is facilitated by the ideological similarity of Labour and Liberal Democrat positions and supporters (Budge 1999; Sanders 1999b) and by evidence that the vast majority of strategic voting in the 1997 election was between Labour and Liberal Democrat supporters to keep the Conservatives from winning (Evans, Curtice and Norris 1998). In general terms, then, the 1997 election was one in which the Conservatives were isolated from other political groupings.

Incumbent popularity. The popularity of the incumbent party was measured with the following question: "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). Responses were recoded so that 5 indicates the most positive response ('Strongly in favor') and 1 indicates the most negative response ('Strongly against'). This measure approximates to the popularity function used in many aggregate studies of economic electoral effects.

Control variables

To limit the possibility of making spurious inferences, our models control for a number of factors that affect both political preferences and economic perceptions. The main axis of party competition and voter attitudes in Britain is that concerning 'left-right ideology',

which contrasts interventionist, redistributive versus pro-market policy orientations (Heath, Evans and Martin 1994; Budge 1999; Sanders 1999b). To tap this concept we use a 6-item Likert scale with established levels of reliability and temporal stability. Indicators for the scales were included in each wave of the survey.[4] Given the centrality of this aspect of British politics, the left-right scale should capture many of the effects of demographic variables that predict vote via their effect on ideology, such as trade union membership, employment status, and social class. Still, relevant demographic variables (initially measured in 1992 and updated where changed) were also included in the models to control for their effects on economic perceptions: social class, age, gender, education, and region as suggested by previous research (Conover, Feldman and Knight 1987; Curtice and Park 1999. Johnston *et al.* 2000).

Education was coded into six categories: Other or none; CSE or equivalent; O-level; A-level; Some post-secondary; University degree. *Age* was categorized into the following groupings; 18-30; 30-45; 46-64; over 65. *Sex*: Female=1; male=0. *Region* was coded as Scotland, Wales, Northern England, the Midlands, and Southern England. *Social class* was measured using the well-established and validated schema developed by Goldthorpe and his colleagues (Erikson and Goldthorpe 1992), containing the following categories: Upper service; Lower service; Routine non-manual; Petty bourgeoisie; Skilled manual workers; Semi- and unskilled manual workers.

We also measured interest in politics and current affairs with questions on attention to politics on TV: "Leading up to a general election, a lot of time on television news is spent on politics and the election campaign. How much attention do you pay to these items?" Attention to politics in newspapers was also included using the following question: "Leading up to a general election, a lot of articles in the newspapers are about politics and the election campaign. How much attention do you generally pay to these articles?" Response options for both items were: none (1); a little (2); some (3); quite a bit (4); a great deal (5). These

controls were included both because people with more involvement in politics and current affairs are likely to be better informed about economic performance and also because they are likely to be over-represented in a panel study with substantial levels of attrition.[5]

Modeling Procedure

Our main analysis involves fitting a series of recursive structural equation models. Guided by the general principals of graphical chains (see Cox and Wermuth 1996; Cox and Wermuth 1993), the analysis is intentionally exploratory with the goal to uncover the relative conditional dependencies of economic perceptions on party support and *vice versa.* Figure 1 displays the models in the form of graphical chains.[6] Variables are placed in boxes that are organized in assumed causal sequence, with explanatory variables put to the right of response variables (i.e., variables are listed in the same order as the regression equations). Variables included together in a box are assumed to be on equal causal footing. Each variable is regressed on all variables in boxes located to its right. Since the models incorporate repeated measures of opinions at different points in time, however, the models are necessarily constrained in two ways.[7]

Firstly, although it is empirically possible to have a strong dependency between opinions at t_1 and t_3 with no dependency between t_1 and t_2, there is little theoretical rationale for allowing this in the model. For example, an empirical relationship between economic perceptions in 1992 and Conservative support in 1997 is unlikely to represent a causal relationship if Conservative support in 1996 is unrelated to economic perceptions in 1992. More importantly, a previously statistically insignificant relationship between t_1 and t_2 can become significant once the t_3 variable is removed from the model. As a result, regardless of

whether they are statistically significant or not, time lags were permitted only as far back until there was no gap in dependency.

Secondly, our theoretical model is concerned mostly with the cross-effects coefficients (i.e., the effects of economic perceptions on party popularity and *vice versa*). Although we can gain greater insight into causation with longitudinal data than we can with cross-sectional data, repeated measures on the same observations over time potentially introduce the problem of biased estimates due to correlated errors. Since serious correlated errors can arise via important unmeasured confounders (i.e., variables that affect both economic perceptions and party popularity), measures were taken to ensure that no obvious ones could be postulated. We not only included all conceivable standard control variables, but also follow the well-known practice for panel models of specifying so-called "stability" coefficients connecting each of the repeated measures through time (see Heise, 1970, Duncan 1972, Wheaton et al, 1977). In other words, each model contains a causal arrow connecting economic perceptions at t_1 to economic perceptions at t_2, a causal arrow from economic perceptions at t_2 to economic perceptions at t_3 and so on. The same strategy is taken with respect to the repeated measures of party popularity. While this strategy does not prevent bias in the coefficients from a particular measure at t_1 to the same measure at t_2, these paths are not of substantive interest, and this bias *does not* affect the cross-effects coefficients (see Kessler and Greenberg, 1981; Rogosa, 1980: Singles, 1985; Lorenz et al., 1995).[8]

An alternative strategy to limit the bias in the cross-effect coefficients is to explicitly model the error correlation (see Bollen 1989). Including all possible correlated errors would result in the models being under-identified, however (i.e., the number of coefficients to estimate would exceed the number of unique elements in the covariance matrix). The model can be made identifiable by placing constraints on some parameters (e.g., constraining some paths to be equal to each other or constraining some error covariances to be 0), Since our

research question requires uncovering *all possible dependencies* between economic perceptions and party support, however, such constraints are undesirable and defeat the purpose of the research, especially since it is not obvious which error correlations should be constrained. The most reasonable model that could be identified specified correlated errors going back two time points for all measures that were repeated but constrained all others to equal 0. We compared the results from such models with the results from the models containing the stability coefficients to ensure that the substantive results were robust to model specification. The findings are not only substantively similar, but those from the correlated error model were even more supportive of the theory. The stability coefficient models impose fewer constraints and thus better uncover all conditional dependencies, however, so we only report the results from these models.[9]

Analysis

The context: short-term aggregate changes

Figure 2 displays aggregate economic trends in unemployment and the cost of living in Britain from 1992-97. We see here that the Retail Price Index dropped between 1992 and 1993, continuing an existing trend, and then remained relatively flat. Unemployment peaked in 1993 and then gradually declined after that point. Both of these economic indicators were slightly more positive in 1997 than they were in 1992. In other words, if anything, these measures suggest that the economy had improved from the beginning to the end of the 1992-97 electoral cycle. Following the economic model of voting, this graph provides no reason whatsoever to expect a decline in Conservative support over the period.

[Figure 2 about here]

Aggregate trends in government popularity did not parallel the state of the economy, however. The BEPS data are consistent with what has also been shown in opinion polls for this period in that government popularity dropped from 43% in 1992 to little more than 20% a year later. This precipitous fall levelled out, but by spring 1995 still only abut a fifth of the electorate with a party preference intended to vote Conservative. Similarly, in the BEPS the decline in support for the Conservatives took place relatively soon after the 1992 election – in the 1993 survey only 63% of those who reported voting Conservative in 1992 still intended to do so.

A similar story is seen in aggregate measures of subjective perceptions of the economy over time. Table 1 shows the over time pattern of mean responses to the two indicators of retrospective economic evaluations in the BEPS, which assess respondents' evaluations of change over the previous 12 months. Comparisons between these figures and aggregate trends are difficult as the BEPS sample is not precisely representative of the population. There is also a problem with direct comparisons of distributions on the questions asked in 1992-93 with those asked later because the latter present respondents with a response format that contains qualifiers distinguishing between a little stronger/weaker and a lot stronger/weaker, while the former do not. Nonetheless, even a cursory examination of the patterns in Table 1 suggests that subjective economic perceptions cannot account for the dramatically declining levels of aggregate Conservative support in the BEPS sample.

[Table 1 about here]

Economic perceptions and party support at the individual level

We now turn to the main focus of our analysis: The micro-foundations of subjective economic voting. Despite that no relationship between the economy and government popularity is evident at the macro level, various commentators have provided evidence for

this relationship at the individual-level. As is evident below, we also find this relationship using only cross-sectional data. Table 2 shows the effects of retrospective economic perceptions measured concurrently in 1997 on Conservative vote (Model A1) and Conservative popularity (Model A2). Model 1A shows significant net effects of economic perceptions – both sociotropic and egocentric – on voting. Those who perceived the macro-economy or their household standard of living to have improved over the previous 12 months were more likely to report voting Conservative. A similar pattern can be observed in Model A2. In both cases, sociotropic effects are larger than are the egocentric effects.

[Table 2 about here]

As expected, we also find that left-ideology has strong effects on both Conservative vote and Conservative popularity (the standardized beta is a very substantial 0.5 for Conservative popularity). The demographic variables, however, are far less predictive. Regional and sex effects were most substantial, with Scotland, Northern England, and women less likely to support or vote for the Conservatives. Education effects are present though muted, with less highly educated respondents being more negative about the Conservatives, while social class produced no significant division in either support or vote. Clearly the reason for these weak demographic effects is the inclusion of left-right ideology in the model. The effects of social class on left-right ideology are substantial, meaning that class effects on these political measures are largely indirect and mediated by ideology and economic perceptions. Also, the effect of class on vote has been estimated to be smaller in 1997 than in any election since the British Election Surveys began in 1964 (Evans, Heath and Payne 1999).

The estimates from Model 1 provide a benchmark against which to compare the magnitude of effects estimated from models that temporally endogenize economic

perceptions. We start with Model B, which adds variables for economic perceptions and government support measured in 1992. Looking first at Model B1, the logit models for Conservative vote, we see that the inclusion of prior vote (which strongly impacts on 1997 vote) and earlier economic preferences reduces the coefficient for the effect of sociotropic perceptions in 1997 by approximately 30%, from .64 to .45 (see Figure 3 and Table 3). There is, however, a significant and substantial effect of 1992 vote on 1997 sociotropic perceptions. Egocentric perceptions, in contrast, are relatively unaffected by the inclusion of prior vote or economic perceptions.

[Figure 3 about here]

Virtually an identical pattern is observed in Figure 4, which presents the results for Model B2 assessing Conservative popularity. Here the inclusion of support for the Conservatives (which again strongly impacts on 1997 support) and economic preferences in 1992 produces nearly a 40% decrease (from .18 to .11) in the size of the coefficient for sociotropic perceptions (unstandardized coefficients and standard errors are in Table 3). There is again a significant and substantial effect of 1992 party support on 1997 sociotropic perceptions. Egocentric perceptions, in contrast, are not significantly conditioned by 1992 party support but their (barely) statistically significant effect on 1997 support is rendered non-significant by the inclusion of prior support and economic perceptions.

[Figure 4 about here]

The results thus far indicate that the relationship between sociotropic economic perceptions in 1997 and Conservative vote and popularity between 1997 are drastically reduced when previous partisanship measures are controlled for. It is quite possible, however, that during the electoral cycle, economic perceptions followed vote switching rather than preceded or accompanied it. Thus changing economic perceptions over the 1992-97 period

may have followed from the decline in Conservative popularity – much of which occurred early in the electoral cycle - rather than caused it. To assess this possibility, Model C includes measures of both economic perceptions and party popularity at five points in time: 1992, 1994, 1995, 1996 and 1997.[10]

Recall from Table 2 that the standardized coefficient for the effect of sociotropic economic perceptions on Conservative popularity in the 1997 cross-sectional model is 0.18. As we seen in Table 4 and Figure 5, for the 5-wave panel analysis this same coefficient has decreased to 0.04. Figure 5 also provides more evidence that egocentric perceptions are of little importance. We now see that personal household-based appraisals of economic change are effectively 'out of the loop' in the temporal relationship between sociotropic perceptions and party popularity. They are neither conditioned by prior party support, nor of noticeable importance for explaining Conservative popularity. The findings are quite clear: Economic perceptions may predict government popularity when measured at the point of outcome, but they have little direct impact on government popularity when their relationship with earlier measures of popularity is taken into account.

[Table 4 and Figure 5 about here]

We also see in Figure 5 that sociotropic economic perceptions are influenced by Conservative party support throughout the electoral cycle. More importantly, the magnitudes of these lagged effects are even larger than the effects of contemporaneously measured sociotropic perceptions on Conservative party support. In 1997, for example, the coefficient for the effect of current sociotropic perceptions on Conservative popularity is only .04 (and only significant at $p<.05$), whereas the lagged effect of Conservative popularity in 1996 on

1997 sociotropic perceptions is .08 ($p<.01$). The pattern is similar for 1996 (.07 versus .14) and 1994 (.11 versus .15). Only in 1995 are the magnitudes equivalent. In other words, *in the year-on-year evolution of party popularity and economic perceptions, it is the former that appears to most strongly drive change.* This finding is even more striking considering that we are comparing associations measured at the same point in time (the effects of economic perceptions on party popularity) with those measured one or more years apart (the lagged effects of party popularity on economic perceptions).

Discussion and Conclusions

Our analysis supports the contention that prior political partisanship, measured as both incumbent (Conservative) popularity and vote, systematically influences economic perceptions. These perceptions should not therefore be assumed to be exogenous variables in models of vote choice or incumbent popularity. In fact, we found that the lagged effects of party popularity on economic perceptions are consistently stronger than the reciprocal effects of concurrent economic perceptions on incumbent support. This does not unequivocally refute economic interpretations of changes in British electoral behaviour during the 1990s, but it does indicate that the role of the economy may have been over-stated. More generally, these findings suggest that the prevailing emphasis on subjective economic explanations of party support and voting should perhaps be reconsidered.

It is important to note that these findings relate specifically to sociotropic measures. Egocentric retrospective perceptions appear to have little influence on party popularity or *vice versa*. That egocentric perceptions are not generally affected by political preferences further emphasizes the relatively endogenous nature of sociotropic retrospective perceptions. As we would expect, egocentric economic perceptions appear to be more likely to be conditioned by

aspects of voters' own personal experiences and those of their households, than by partisanship.

These conclusions must be qualified by limitations of the data. Respondent attrition, for example, can be an important issue for generalizations from panel studies. Nonetheless, we compared the respondents remaining in the final wave with those in the original 1992 sample, finding evidence of only minor differences in relevant respondent characteristics. Moreover, given that, *ceteris paribus*, the later waves of any panel study of political attitudes and behaviour will tend to contain a greater proportion of politically informed and motivated respondents than are present in the population from which it was sampled—not only through attrition but possibly also because of the conditioning effects of panel responding—this serves only to strengthen confidence in our findings. The endogeneity argument derives its persuasiveness from the presence of people in the electorate who take their cues from their party, who are relatively poorly independently informed about economic affairs, and who thus undermine the non-political sources of judgment about the workings of the macro-economy. We found, however, that political influences outweigh the reciprocal effects of economic perceptions even among those who are motivated, knowledgeable and interested in politics. It is reasonable to suggest that the evidence for endogeneity of economic perceptions would be even stronger among the population as a whole.

Some may also ask whether party loyalties in Britain are more fixed and if the British party system is more ideologically polarized than in other countries. If so, this would provide a favourable context for the expression of political influences on voters' beliefs. Nonetheless, previous findings indicate that by the 1997 election British politics was in many ways less polarized and British party supporters less attached, than at any previous time for which measures can be obtained (Budge 1999; Sanders 1999b; Webb and Farrell 1999; Thomson and Thomson 1999). Sanders and Price have also presented evidence that political events

have a substantial influence on economic expectations during a different period in the British political context (Sanders and Price 1995).

On a related note, if this period in British politics is unusual with regard to the muted impact of the economy, the generalizability of these findings beyond this context is open to question. As we pointed out earlier, the conditions under which endogeneity is most likely are exactly those where the macro-economy is in middling to positive health. Britain in the 1990s would appear to fall into this class of moderately positive economic situations. If that situation should change, however, concern about the economy might re-emerge as an exogenous basis of voters' political choices. A sharp economic shock sends messages that are clear to many and which are less vulnerable to manipulation by parties. The 1992 currency crisis and the decline in negative economic indicators such as unemployment and the retail price index, however, give clear evidence of the variation and potential salience of economic issues during this period. In any event, future research should assess the conditions under which the endogeneity of economic perceptions is more or less pronounced.

Our evidence challenges not only assumptions about the role of the economy in the 1997 British General Election but also the more general assumptions of the subjective economic voting models. If these findings are generalizable, cross-sectional models using economic perceptions as independent variables, without also including some sort of independent variable measuring party attachment, overestimate economic effects on voting. These findings signal the importance of further research into the assumptions about individual-level processes that underpin the aggregate-level economic voting. More specifically, they indicate the importance of augmenting the large number of individual-level economic voting studies that use cross-sectional data with more extensive panel-based analysis.

In conclusion, we would like to consider the normative implications of these findings. Mutz (1998) and others have argued that the intellectual appeal of the economic voting model is that it confirms fundamental notions of democratic accountability: Voters respond to objective indicators of government performance and reward or punish as appropriate. Evidence questioning the link between the economy and vote choice raises questions about the efficiency of this process of accountability. The evidence we have provided of the influence of political attachments on economic evaluations is doubly concerning, as it is the political actors themselves who can weaken the connection between achievement and evaluation. The effect of political attachments on economic perceptions may thus help to explain why governments can appear to be 'teflon-coated' despite poor economic performance. Popular incumbent parties carry with them an inbuilt bias among the electorate to perceive their economic performance in a more positive light than might otherwise have been the case. Economic voting may therefore be a less effective mechanism of democratic accountability than has previously been assumed.

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Table 1
Descriptive statistics (means and percentages) for economic perceptions and Conservative vote/popularity (standard deviations in parentheses)

	Year					
Variable	1992	1993	1994	1995	1996	1997
Conservative vote (V_{92}-V_{97})	37.5%	24.5%	21.8%	18.4%	20.0%	25.0%
Conservative popularity (P_{92}-P_{97})	3.10 (1.31)	NA	2.41 (1.21)	2.35 (1.19)	2.50 (1.17)	2.52 (1.20)
Perceptions of household income during last year (E_{92}-E_{97})	1.69* (.69)	1.44* (.59)	2.47 (.99)	2.48 (.97)	2.66 (.94)	2.69 (.90)
Perceptions of British economy during last year (S_{92}-S_{97})	1.57* (.69)	1.54* (.70)	2.83 (1.00)	2.78 (.92)	2.96 (.89)	3.40 (.89)

In 1992 and 1997 vote for the Conservative Party is reported vote in the General Election; In all other years it refers to voting intentions.
The popularity of the Conservative Party was not measured in 1993. In all other rounds it was measured using 5-point scales.
*Economic perceptions were measured on 3-point scales 1992 and 1993; in 1994-97 they were measured on 5-point scales.

Table 2
Cross-sectional models for 1997 of Conservative Vote and popularity

	Model A1 *Conservative Vote, V_{97} (Logit Model)*		**Model A2** *Conservative Popularity, P_{97} (OLS Model)*		
Independent Variables	*B*	*S.E.*	*B*	*S.E.*	*Std. B*
65+ years old	.167	.276	.099	.093	
46-64 years old	.021	.224	-.016	.072	
30-45 years old	-.312	.219	-.116	.070	
18-30 years old	—	—	—	—	
Men	-.709***	.171	-.275***	.054	
Upper service	.297	.289	-.029	.095	
Lower service	.039	.270	-.052	.085	
Routine non-manual	.048	.240	-.024	.074	
Petty bourgeoisie	.206	.305	.069	.104	
Skilled manual	-.010	.286	.017	.083	
Semi & unskilled manual	—	—	—	—	
Other or none	.424	.310	.264*	.103	
CSE or equivalent	.846*	.338	.303**	.114	
O-level	.416	.291	.200	.099	
A-level	.324	.312	.193	.105	
Some post-secondary	.292	.273	.174	.094	
University degree	—	—	—	—	
Scotland	-.897***	.210	-.187**	.064	
Wales	-.296	.433	-.032	.131	
Northern England	-.621**	.203	-.165*	.066	
Midlands	-.107	.192	.024	.069	
Southern England	—	—	—	—	
Left-Right ideology	.377***	.027	.161***	.007	.502
Attention to politics on TV	-.119	.067	-.032	.021	-.032
Attention to politics in newspapers	.048	.060	-.019	.019	-.020
Perceptions of household income during last year (E_{97})	.241**	.088	.063*	.027	.048
Perceptions of British economy during last year (S_{97})	.641***	.101	.241***	.031	.180
Intercept	-9.977	.691	-6.87	.189	
Overall Model	LR χ^2 (23 df)=627.51 p <<.001 N=1637 Cox and Snell R^2=.318		N=1634 R^2=.395		

**p<.05, **p<.01, ***p<.001

Table 3

Coefficients for selected regression equations for graphical chain models of Conservative vote/popularity and Economic Perceptions, in the 1992 and 1997 waves of the BEPS

Model B1: *Conservative Vote and Economic Perceptions*

Response	Explanatory variables			R^2
V_{97}	S_{97}	E_{97}	V_{92}	
B	.448**	.285*	2.50**	.41
S.E.	.114	.101	.182	
V_{92}	S_{92}	E_{92}		
B	.425**	.260*		.36
S.E.	.090	.095		
S_{97}	V_{92}	S_{92}		
B	.299**	.117**		.30
S.E.	.046	.028		
E_{97}	E_{92}			
B	.271**			.14
S.E.	.032			

Model B2: *Conservative Popularity and Economic Perceptions*

Response	Explanatory variables		R^2
P_{97}	S_{97}	P_{92}	
B	.144**	.448**	.55
S.E.	.027	.019	
std. B	.107	.491	
P_{92}	S_{92}	E_{92}	
B	.270**	.099*	.49
S.E.	.034	.034	
std. B	.144	.052	
S_{97}	P_{92}	S_{92}	
B	.096**	.110**	.30
S.E.	.018	.029	
std. B	.140	.089	

*p<.01, **p<.001

Note: All equations in the model control for age, gender, social class, education, left-right ideology, political interest and region.

Table 4
Coefficients for selected equations from Model C (Conservative Popularity and Economic Perceptions, 5-wave analysis 1992-97).

Response	Explanatory variables					R^2
P_{97}	S_{97}	P_{96}	P_{95}	P_{94}	P_{92}	
B	.051*	.372***	.224***	.168***	.168***	.74
S.E.	.023	.029	.027	.026	.026	
std. B	.039	.364	.223	.171	.171	
P_{96}	S_{96}	P_{95}	P_{94}	P_{92}		
B	.085***	.403***	.243***	.165***		.76
S.E.	.020	.022	.023	.018		
std. B	.065	.411	.253	.185		
P_{95}	S_{95}	E_{95}	P_{94}	P_{92}		
B	.108***	.070***	.506***	.176***		.67
S.E.	.021	.019	.022	.020		
std. B	.107	.057	.519	.195		
P_{94}	S_{94}	S_{92}	E_{94}	P_{92}		
B	.129***	.081**	.049*	.465***		.59
S.E.	.021	.029	.020	.018		
std. B	.107	.047	.040	.505		
P_{92}	S_{92}	E_{92}				
B	.270***	.099**				.49
S.E.	.033	.034				
std. B	.144	.052				
S_{97}	P_{96}	S_{96}	S_{95}	S_{94}		
B	.062**	.206***	.144***	.084***		.39
S.E.	.022	.026	.026	.023		
std. B	.082	.206	.148	.098		
S_{96}	P_{95}	S_{95}	S_{94}			
B	.106***	.281***	.166***			.34
S.E.	.021	.026	.023			
std. B	.144	.286	.191			
S_{95}	P_{94}	S_{94}	S_{92}			
B	.084***	.312***	.106***			.29
S.E.	.021	.022	.030			
std. B	.113	.349	.081			
S_{94}	P_{92}	S_{92}				
B	.114***	.215***				.20
S.E.	.021	.034				
std. B	.148	.149				
E_{95}	E_{94}	E_{92}				
B	.269***	.202***				.19
S.E.	.024	.035				
std. B	.272	.144				
E_{94}	E_{92}					
B	.303***					.11
S.E.	.034					
std. B	.212					

*p<.05, **p<.01, ***p<.001

Figure 1

Graphical depiction of the initial models

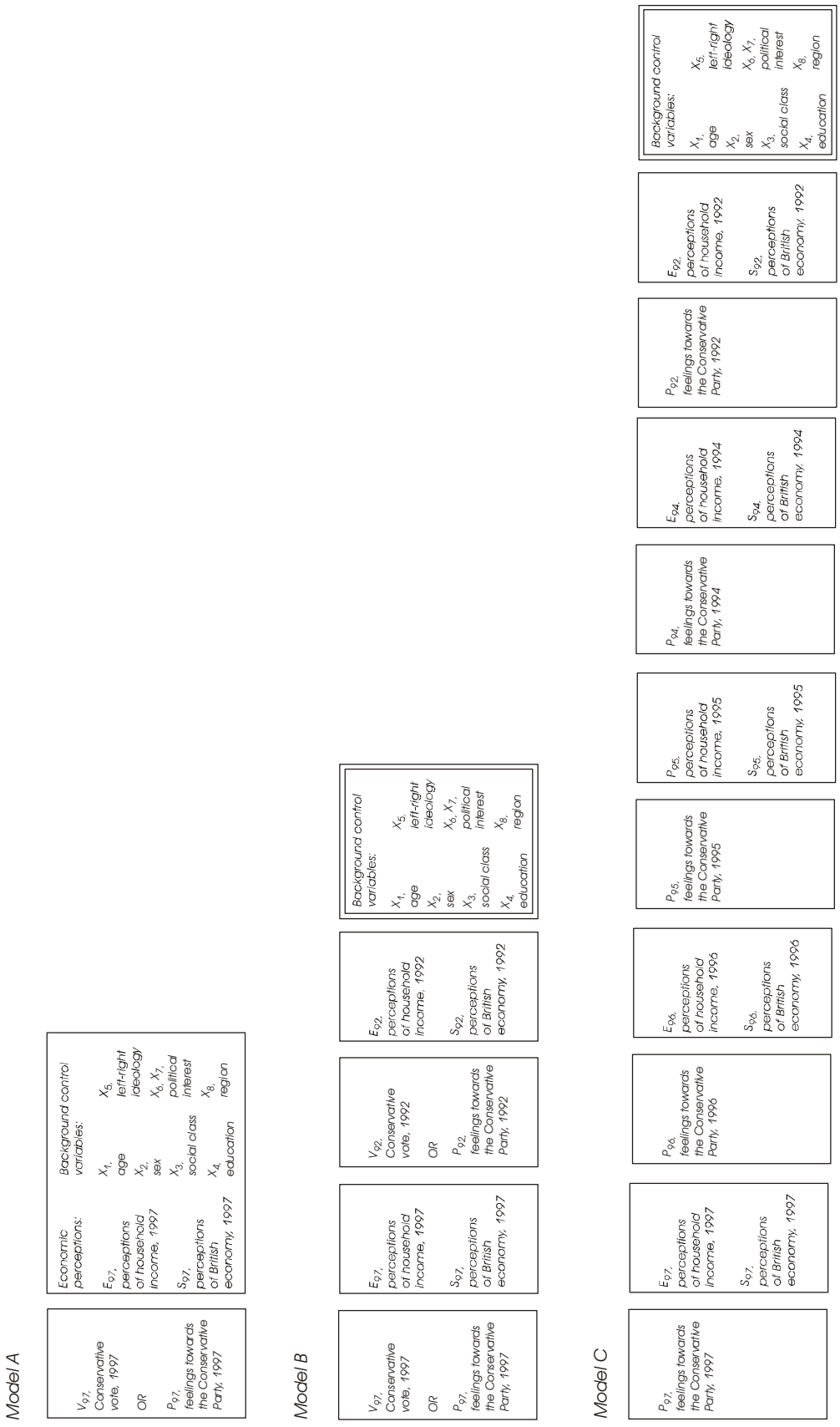
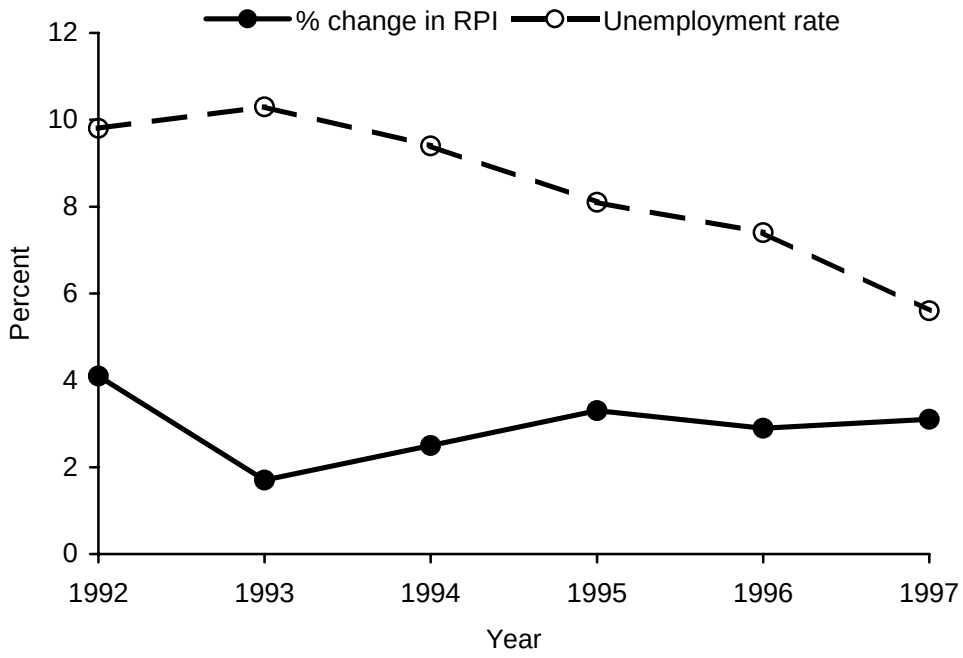


Figure 2

Unemployment and Inflation rate for Great Britain, 1990-97. Inflation rate is measured by the retail price index. Unemployment is measured according to the International Labour Office definition.



Source: Adapted from Heath, Jowell and Curtice (2001: 35).

Figure 3

Graphical depiction of Model B1: Conservative Vote and Economic Perceptions in 1992 and 1997. *V=Conservative Vote*; *S=Sociotropic Perceptions*; *E=Egocentric Perceptions*. Subscripts represent year.

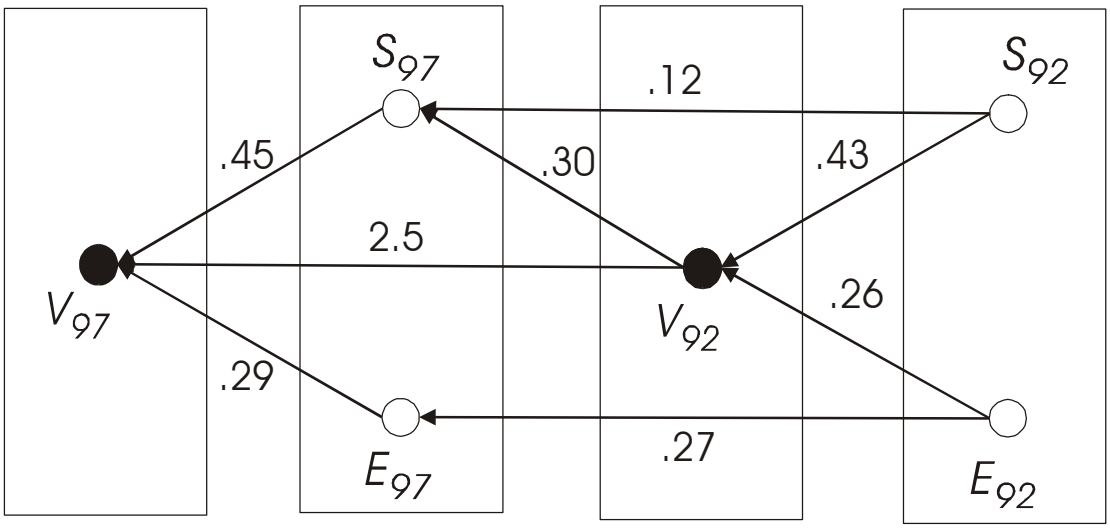


Figure 4

Graphical depiction of Model B2: Conservative Party Popularity and Economic Perceptions in 1992 and 1997. *V=Conservative Party Popularity*; *S=Sociotropic Perceptions*; *E=Egocentric Perceptions*. Subscripts represent year.

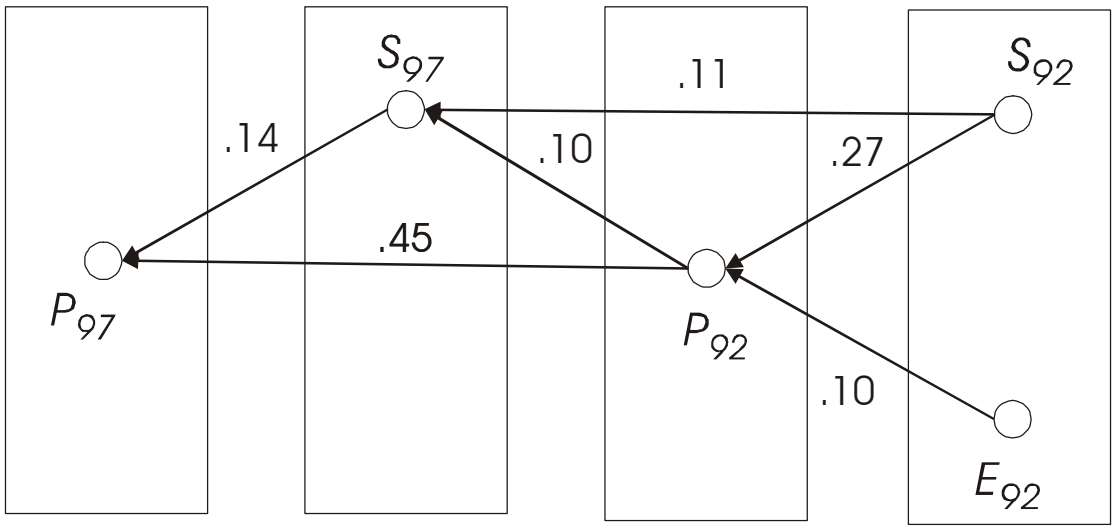
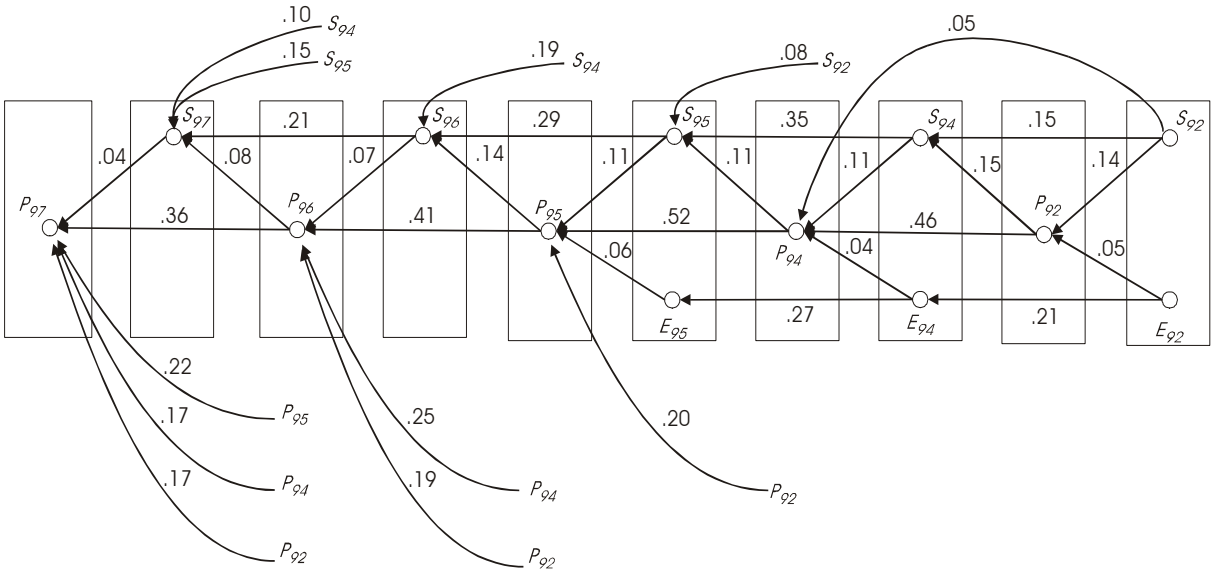


Figure 5

Conservative Popularity and Economic Perceptions, 1992-97 (Model C). Paths display standardized coefficients. *P=Conservative Party Popularity*; *S=Sociotropic Perceptions*; *E=Egocentric Perceptions*. Subscripts represent year.



ENDNOTES

[1] "… the search for the preferred macroeconomic indicators, and their lagged effects pattern, has been largely abandoned. In the second wave of popularity function work, objective economic measures have been replaced with subjective ones. The models now contain aggregate perceptual evaluations of general economic performance instead of hard data on unemployment, inflation, income, or growth" (Lewis-Beck and Stegmaier 2000: 186).

[2] Although commonly employed, it is impossible for structural equation models fitted to cross-sectional data to determine contemporaneous effects. As Lorenz et al. (1995:1050) argue, "And by what magic can a symmetric covariance matrix lead to an asymmetric inference that some concept X has an effect on Y that is larger, stronger, occurs more often, or in some sense dominates over the effect that Y has on X? This sense of mystery is present in both its cross-lagged and contemporaneous models, but especially so in the contemporaneous versions." For further elaboration on this issue see Cox and Wermuth (1993).

[3] See Thomson (2001) for information on the design and rates of attrition of the BEPS. Comparisons of the characteristics of the original sample with those of the sample used in the statistical analysis indicate that attrition is not a major problem. In order to ensure that attrition was not influencing our results, we also performed the same analysis on all those who were missing in only one round. The results of this analysis were substantively identical. These results are available from the authors by request.

[4] *Left-right ideology* is measured via summated responses to six items: Ordinary people get their fair share of the nation's wealth. There is one law for the rich and one for the poor. There is no need for strong trade unions to protect employees' working conditions and wages. It is government's responsibility to provide a job for everyone who wants one. Private enterprise is the best way to solve Britain's economic problems. Major public services and

industries ought to be in state ownership. The development and tests of the reliability and validity of this scale are presented in Heath, Evans and Martin (1994), and Evans and Heath (1995).

[5] Issues and leader evaluations specific to the 1997 election were also included as controls in preliminary models. Although including these variables led to models that could actually strengthened our argument, the results indicated that the models were over-controlled, so these variables are not included in the final models reported here. For example, including leader appraisals led to the nonsensical result that economic perceptions are negatively related to support for the incumbent Conservative Party—i.e., the better the economy was doing, the less popular the Conservatives were. Moreover, since we did not have issue questions for each wave of the study, we exclude them form the analyses reported here, including the left-right scale, for which we have information from all waves, in its place. One 1997 issue that differentiate between parties—support for the Euro—did have an impact of Conservative popularity, but excluding it from the models did not alter the main findings.

[6] The standard diagrammatic representation of graphical chain models is outlined by Cox and Wermuth (1996). Hollow nodes (circles) are used to depict continuous variables; solid nodes are used to depict discrete variables. Nodes are placed in boxes that are organized in sequence according to an assumed causal order, with explanatory variables put to the right of response variables (in the same order as the regression equations). Variables included together in a box are assumed conditionally independent given all variables to the right—i.e., they are on an equal causal footing. Double-lined boxes contain control variables on which all other variables in the model are considered dependent. Conditional dependencies between variables are represented by edges connecting the nodes, with directed edges (arrows) being used to

represent causal direction. The absence of an edge connecting nodes implies that the conditional independency is weak enough not to be of substantive interest.

[7] To determine dependencies, we use ordinary least squares in cases when the dependent variable is quantitative and logistic regression when the dependent variable is binary. We use the standard practice of omitting from our models all explanatory variables for which the studentized regression coefficient is less than 2.0. Initially removed variables are then added to the model incrementally one at a time to ensure that the relationships are not statistically significant. The final models are then fitted with only those variables that are statistically significant.

[8] Although some researchers use difference scores ($d=x_{t2}-x_{t1}$) to measure change, there is debate about the reliability of *d* for individual-level survey data. There is some evidence that when measurement error is present, the reliability of *d* can be less than the reliability of either x_1 or x_2 (for more on this debate see Cronbach and Furby, 1972; Bittner, Carter and Kennedy, 1986; Rogosa, Brandt and Zimowski, 1982; Rogosa and Willett, 1983). Following this, our models use the variables themselves rather difference scores to assess change over time.

[9] Results from the models allowing correlated errors are available on request from the authors.

[10] Preliminary analysis indicated that models of vote produce substantively equivalent results.