

Economic Performance, Management Competence and the Outcome of the Next General Election

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Working Paper n.124
Barcelona 1996

A number of models of UK electoral preferences, based on aggregate-level popularity functions, have been developed over the last 25 years or so¹. The early models all assumed that there were direct connections between the condition of the macroeconomy (generally measured in terms of unemployment and inflation) and the pattern of support (as indicated by monthly or quarterly opinion poll ratings) for the major political parties: governments were «rewarded» with greater support if their performance was «good»; they were «punished» by reduced support if performance was «poor»². The main aim of these analyses was typically to establish how much extra support a government could expect to obtain if it reduced either unemployment or inflation (or, even better, both) by, say, a percentage point over a 3-month period. During the 1980s analysts began to include voters' *perceptions* of the state of the economy, rather than just its «objective» condition, as predictors of political support³. These analyses suggested that voters' perceptions of what is happening to the economy appear to be more important in determining patterns of political support than the economy's objective condition -though, obviously, there are important connections between macroeconomic changes and electors' economic perceptions. In the 1990s, analysts have finally begun to follow through the statistical logic of their popularity functions. They have ceased to employ these functions simply as devices for analysing the past fortunes of political parties and have started to explore their utility for forecasting future movements in political support⁴.

I have reviewed elsewhere the success of one simple forecasting model that correctly predicted the outcome of the 1992 British general election -some 18 months in advance of the event⁵. In this paper I discuss the prospects for successfully forecasting the outcome of the next UK general election. The paper's main methodological concern is with the problem of deciding which estimation period should be used in order to produce a particular set of political forecasts. The principle substantive aim to develop a series of models that simulate the likely political fortunes of the present government over the next year or so. Given that Labour popularity generally varies inversely with that of the Conservatives⁶, I concentrate solely on developing a suitable popularity function for the Conservative Party.

The first part of the paper briefly reviews some of the evidence which supports the conclusion that UK voters' subjective economic perceptions are more important than objective economic realities in determining their political preferences. The second part develops a series of forecasting equations based partly on different estimation periods and partly on different assumptions about

which particular economic perceptions will prove decisive in British politics in the run-up to the next general election. Although the precise results of the various forecasting models differ, they all converge on the conclusion that the Conservatives cannot recover sufficiently on the basis of purely economic considerations to win that election.

THE IMPORTANCE OF ECONOMIC PERCEPTIONS

Figures 1-7 show the general connections (or lack of them) between Conservative Party popularity and a range of measures of economic performance. (I assume throughout the ensuing discussion that increases in unemployment, inflation, interest rates and taxation⁷ connote «bad» performance whereas increases in disposable income connote «good» performance). With the possible exception of the two interest rate variables and taxation (which tend to trend upwards when popularity trends downwards and *vice versa*) what is remarkable about the various figures is the lack of any obvious visual relationship between popularity and economic conditions. Indeed, as Table A1 in the Appendix indicates, this conclusion is also supported by more formal statistical models. These models show that, when appropriate controls are made for aggregate economic perceptions and for certain key political events, unemployment, inflation, personal disposable income and interest rates -whether measured as levels, changes in levels or rates of change; whether lagged or unlagged- all fail to exert direct effects on Conservative popularity.

To analysts unfamiliar with recent work on British popularity functions, this conclusion may seem surprising. What has become increasingly clear over the last decade or so, however, is that the effects of the real economy on UK voters' political preferences are strongly mediated by voters' economic perceptions. The relationship between incumbent party popularity and one of the pivotal sets of economic perceptions is shown in Figure 8⁸. As the figure shows, when aggregate personal economic expectations rise, the Conservatives' poll ratings also tend to rise -and *vice versa*. The theoretical interpretation of this relationship is simple. If I am optimistic about my economic prospects, I am more inclined to seek to preserve the *status quo* that has produced my optimism; if I am pessimistic about my economic prospects, I am more inclined to seek to change the *status quo* that has produced my pessimism. As Figure 8 clearly demonstrates, the general elections of 1983, 1987 and 1992 were all preceded by a lengthy period of gradually rising personal expectations -the ideal platform for an incumbent government to secure its own re-election.

More formal statistical models of the relationship between personal expectations and government popularity show that it is both stable and robust over the 1979-1994 period⁹. The balance of evidence also suggests that it is personal expectations that have exerted a causal influence upon Conservative support rather than the other way round. Simple exogeneity tests confirm that, whereas lagged values of personal expectations predict popularity, lagged values of popularity do not exert a significant impact on expectations¹⁰. The intriguing questions in this context, of course, are: «What is it that influences personal expectations?»; and «Does the economy at least affect expectations even if it fails to exert a direct effect on incumbent party popularity?» Table A2 in the Appendix carries out tests analogous to those shown in Table A1, using aggregate personal expectations as the dependent variable. The table shows that the only significant macroeconomic influences on expectations during the 1979-1994 period were (1) changes in real interest rates (which exert a *negative* effect: when real interest rates rise, expectations fall) and (2) the volume of transactions in the housing market (which exert a *positive* effect: when transactions are buoyant, so are expectations). I return to the character and implications of these various connections below.

Personal economic expectations, however, are by no means the only economic perceptions that are capable of mediating the relationship between the objective economy and political support. A second potentially important set of perceptions concerns *attributions of responsibility* for economic success or failure. Individual voters may or may not hold government responsible for whatever is happening to the economy. If the economic news is good, voters may not credit the government for it. If the news is bad, they may lay the blame on someone or something else. In circumstances such as these, we would clearly expect to observe no relationship between objective economic change and support for the government. Unfortunately, the problem with the attribution question is that there are no continuous, over-time data available which might enable us systematically to measure the extent to which governments are held culpable for economic success or failure. To be sure, there are some fragmented data which relate to the position of the current government. (These suggest that there has been a marked change since the last election in the extent to which voters blame the government for the length and depth of the 1990-1993 recession. By the spring of 1994, almost three quarters of Gallup's respondents believed that the government was either «very» or «somewhat» responsible). The lack of a sustained time-series, however, means that in the UK context the long-term role of voters' perceptions of government culpability simply cannot be assessed.

A third set of economic perceptions is potentially the most important of all. These concern the extent to which the government is seen as being competent to manage the economy. Survey questions about the relative merits of the Tories and Labour as economic managers have been asked periodically since 1964. Almost without exception (one notable example being at the time of the introduction of the poll tax in March 1990), the Conservatives have been more favourably regarded than Labour. Not surprisingly, perhaps, the party which has traditionally been viewed (rightly or wrongly) as representing the interests of business has tended to be seen as the one most able to run a mixed economy.

Since the beginning of 1991 Gallup have included an economic competence question in their monthly Gallup 9000 survey. This means that, for the first time, we now have a continuous series of observations which measure mass perceptions of the relative economic competence of the two major parties. Figure 9 shows what happened to these perceptions between January 1991 and August 1995 -and how changes in them appear to have corresponded to changes in support for the government. Until the middle of 1992, the competence series is above the zero line -reflecting the clear lead which the Conservatives had apparently enjoyed for most of the period since 1964. Note, however, what happened at the time of Britain's ignominious exit from the ERM in September 1992. The competence graph (as well as the popularity graph) plunges downwards and continues to trend downwards thereafter. Although there can be little doubt that the Conservatives have only themselves to blame for this downward shift in their fortunes, it is worth emphasising the complementary role played by the Labour Party. Since the mid 1980s Labour has progressively shed the image of extremism and irresponsibility in which it cloaked itself as a result of the 1983 manifesto. The 1989 Policy Review moved Labour back towards the centre ground of British politics. Since the 1992 election, John Smith's Presbyterian rectitude and Tony Blair's evident moderation have further extended Labour's appeal. The shift in the graph described in Figure 9 owes just as much to Labour's self-transformation as it does to the Conservatives' failure to satisfy the electorate's economic aspirations.

It is worth noting, finally, that the Conservative lead on economic competence that was evident until mid 1992 had almost certainly been a crucial background resource that predisposed many voters to support the Conservatives electorally -particularly in times of economic uncertainty. From the time of the ERM crisis in September 1992, that resource seems to have dissolved. Whether it was the trauma of the crisis itself that provoked the step-shift in perceptions, or

whether the crisis merely triggered a change in perceptions that, as a result of three years of recession, was «waiting to happen», is impossible to say. In any event, there can be no doubt that, since September 1992, the Conservatives have lost a crucial support cushion which they must restore if they are to stand any chance of re-election in 1996 or 1997.

Where does all this leave us? What the forgoing discussion suggests is that the connections between macroeconomic changes and UK government popularity since 1979 have been fundamentally indirect. The effects of the macroeconomy during the 1980s and early 1990s operated mainly through voters' personal expectations: when real interest rates rose (fell), so did expectations; and when expectations rose (fell), so did government popularity. Most other macroeconomic variables (with the exception of taxation and property transactions) failed to exert either direct or indirect effects on government popularity. The sort of two-stage model of Conservative support implied by this analysis is summarised in Figure 10. The parenthetical reference in the figure to «economic competence» reflects the potential importance of these perceptions as implied by the evidence presented in Figure 9 above. The reference to «press coverage» reflects research conducted for the 1979-1987 period -not developed here because of lack of data availability- which shows that expectations can be significantly affected by the way in which the national press reports economic news¹¹.

THREE FORECASTING MODELS FOR 1996-1997

A number of serious difficulties invariably confront the political forecaster. Since it is not possible to discuss all of them here -and since they are summarised elsewhere-¹² I focus here on a problem that is often paid relatively scant attention: that of the length of the estimation period which should be used in order to generate forecasts. The standard econometric solution to this problem is simple: use the longest contingent time period available. Although this solution is entirely satisfactory for a model that is thought to be very well-specified, it is less attractive in circumstances where many of the possible influences upon the dependent variable in question simply cannot be effectively measured. In politics, unlike in macroeconomic relationships, there are many intangibles -symbols, identities, personalities, policies, external threats and challenges- that change in ways that are not susceptible to formal modelling. In these circumstances, the average relationship between a given Y_t and X_t , over the last thirty years may not be as good a guide to their likely relationship over the *next* three years as their

more recent relationship. Indeed, in political forecasting, until we have contrived more effective ways of operationalising what is currently unmeasurable, the choice of estimation period must depend upon the analyst's judgement as to which past period the medium-term future is most likely to resemble.

The ensuing analysis tests out the implications of using different estimation periods in order to produce medium-term forecasts of UK government popularity. Specifically, I consider the consequences of estimating a particular popularity function against data from two different (but overlapping) time periods and then using each of the resultant models to forecast popularity in the same post-sample period. Thus, a popularity function is developed which is estimated (a) for the period June 1979-December 1993 and (b) for the period January 1991-December 1993¹³. The parameter estimates from (a) and (b) are then employed to generate two different sets of popularity forecasts for the period January-November 1994. The discussion focuses on the differences between these two sets of forecasts and on their accuracy in predicting actual government popularity levels during 1994. A third function is then developed which incorporates additional data on economic management perceptions -data that, as noted above, are only available for the period since January 1991.

Table 1 presents a simple forecasting model for the 1979-1993 period¹⁴. The two-stage model, based on the relationships outlined in Figure 10, is derived using the standard general-to-specific econometric methodology advocated by Hendry and his associates¹⁵. The initial specification for the popularity equation embraced a large number of lagged and unlagged candidate predictor variables. These included: (1) measures of the objective economy such as unemployment, inflation, disposable income, taxation, and (real and nominal) interest rates -as in Tables A1-A2, all measured as levels and as changes in levels; (2) a measure of aggregate personal economic expectations; (3) and a series of potentially important «event dummies» (such as the Falklands War)¹⁶. The final specification retains only those variables that exerted a significant effect on Conservative popularity. Similarly, the initial specification for the expectations equation included the same set of objective macroeconomic measures and event dummies. It also included a measure of the volume of property transactions -in recognition of the peculiar importance of the housing market during the 1980s in fuelling UK consumer confidence. The final specification retains only those variables that exerted a significant effect on expectations.

Several features of Table 1 are worth highlighting. First, only one of the objective macroeconomic measures -taxation- exerts a direct (and marginally

significant) effect on Conservative popularity over and above the highly significant effects of personal expectations. The negative sign on the coefficient indicates that increases in taxation -as common sense would suggest- served to reduce support for the government. As anticipated in the earlier discussion of Figures 1-6, none of the other objective measures directly affects support. Second, the Falklands War (in the spring of 1982) and the removal of Margaret Thatcher (in November 1990) both boosted government popularity -though, as the coefficient on the lagged dependent variable indicates, these effects discounted quite rapidly (at the rate of .83 per month). Third, aggregate personal expectations during the 1979-1993 period were significantly affected by two macroeconomic variables: changes in real interest rates (lagged by 2 months); and the level of property transactions (lagged by three months). The signs on both of these variables are in line with theoretical expectations: reductions in real interest rates and a strengthening property market both served to raise aggregate expectations. Fourth, the Falklands War and the removal of Thatcher also boosted expectations, while the introduction of the poll tax (in March 1990) significantly reduced them. Again, however, the effects discounted relatively quickly -at the rate of .80 per month. Finally, it is worth stressing that the reported equations all pass the standard battery of diagnostic tests¹⁷.

Table 2 describes an equivalent model to that shown in Table 1 for the period January 1993 to December 1993. The specification differs from the longer-term model in Table 1 in two minor respects: (1) the property transactions term is dropped from the expectations equation because it is non-significant over the 1991-1993 period; and (2) in the popularity equation, a *change* in taxation variable (lagged one month) replaces the simple level of taxation index that appears in Table 1 -on the grounds that this specification, for the shorter time period, produces a better fit to the data. The general account of the determinants of government popularity that the results provide, however, is very similar to that indicated in Table 1. Popularity is influenced positively by aggregate personal expectations (note the similarity of the expectations coefficients in Tables 1 and 2) and negatively by taxation¹⁸. Expectations, in turn, are influenced by changes in real interest rates -again lagged by two months.

But if these two models both provide parsimonious, theoretically plausible and statistically significant descriptions of the respective time periods to which they refer, how well do they predict changes in Conservative popularity after December 1993? Table 3 shows the relevant results. It displays the popularity forecasts for 1994 generated by the two models outlined in Tables 1 and 2, together with the size of the residual associated with each forecast (the difference

between observed and forecast popularity) and a summary measure of the overall accuracy of the forecasts. What is clear from an inspection of Table 3 is that neither the 1979-1993 model nor the 1991-1993 were particularly good at forecasting what was to happen to Conservative popularity during 1994. The long-term model is particularly weak in the sense that it consistently overestimates Conservative support. (Its «root mean» score -its average prediction error- is 3.5). Indeed, the 1979-1993 model produces a negative residual of increasing magnitude as the year progresses: by November, it overestimates Conservative support by almost 5 percentage points. The short-term model provides some predictive improvement in terms of its lower root mean of 1.2. However, its pattern of underestimation (January-July) and subsequent overestimation is worryingly systematic: a convincing set of forecasts would exhibit a far more random pattern.

Although neither set of forecasts makes a compelling case for the estimation model on which it is based, the results shown in Table 3 lend some support to the notion that short-term models may be more appropriate than long-term models in the generation of political forecasts. The statistical model described in Table 1 undoubtedly reflects the very strong relationship that existed between Conservative popularity and personal economic expectations during the 1980s and early 1990s. It is possible, however, that that relationship was predicated upon the existence of some other, unmeasured, factor which was relatively constant between 1979 and, say, 1992. If this was indeed the case, then a forecasting model based largely on a period when the unmeasured factor was constant might well prove less satisfactory than an equivalent model based mainly on a period when the unmeasured factor was changing.

The evidence presented in Figure 9 above corresponds exactly to the sort of «unmeasured factor» referred to here. Such fragmented evidence as there is suggests that, during the 1980s and early 1990s, the Conservatives consistently enjoyed a reputation for sound economic management skills. Between January 1991 (when economic management competence was first assessed on a regular monthly basis) and September 1992, this reputation continued. From the time of the ERM crisis, however, the Conservatives' management reputation has gone from bad to worse. It seems plausible to argue in these circumstances that this change in voters' competence perceptions may have damaged the linkage between expectations and government popularity upon which successive Conservative chancellors were able to rely between 1979 and 1992. I may be more optimistic about my future economic prospects but, if I believe strongly that the main opposition party is best able to manage the economy, I may not want to

preserve the *status quo* that has produced my optimism. Raising my expectations under these conditions may not increase my inclination to support the incumbent government.

What is being suggested, then, is that the greater inaccuracy of the long-term forecasting model, in comparison with the short-term forecasting model, may result from the greater statistical weight (in terms of the numbers of cases being analysed) accorded in the long-term model to relationships that were predicated on voters' perceptions of the Conservatives as superior economic managers. More seriously, however, both sets of forecasts shown in Table 3 may be inaccurate because they fail to take account of an unmeasured variable - perceptions of managerial competence- which has changed considerably since the autumn of 1992.

The obvious course of action in these circumstances is to introduce a measure of management competence perceptions («competence») into the analysis -though this necessarily restricts any model estimation to the period since 1991. There are a number of ways in which «competence» could be incorporated into the sort of model described in Tables 1 and 2 (a) as an extra independent variable in either the popularity or the expectations equation; (b) as an interaction term in combination with expectations in the popularity equation; and/or (c) as an intervening variable between expectations and popularity in an additional equation. Although the results are not reported here, all of these possibilities were tested against data for the 1991-1995 period. What is clear from these results -and they are anticipated by the strong graphical relationship between Conservative popularity and competence shown in Figure 9- is that the impact of competence on popularity is so powerful that it drives out the effects of personal expectations. This does not necessarily mean, however, that there is no role for expectations whatsoever. It is clearly possible that voters may view the governing party as displaying greater competence insofar as it improves their own personal prospects -even if there are many other (unspecifiable) factors that influence competence perceptions.

Table 4 sets out a simple 3-stage model of Conservative popularity which hypothesises: (1) that popularity is directly affected by competence perceptions (positively) and by taxation (negatively); (2) that competence perceptions are (positively) affected by expectations and, as is evident from the downward step-shift in Figure 9, by the ERM crisis of 1992¹⁹; and (3) that expectations, as in Table 2, are (negatively) influenced by real interest rates²⁰. The results reported in Table 4, estimated for the 1991-1993 period, clearly support these hypotheses.

Expectations continue to influence popularity but, because their effects are mediated through competence perceptions, the impact of a unit change in expectations is considerably less in the Table 4 model ($b=.21 \cdot .11=.02$) than in the Table 2 model ($b=.10$). The Table 4 model accordingly dampens down the effects of expectations, suggesting that the prospects for an expectations-lead recovery in Conservative fortunes before the next general election are rather less than might supposed on the basis of the results shown in either Table 2 or Table 3.

Table 5 shows the post-sample forecasts and forecast errors (for January-November 1994) for the model estimated in Table 4. Comparison between Tables 3 and 5 is instructive. Whereas the forecasts for the simple 2-stage expectations model in Table 3 produced marked and systematic forecasting errors, the 3-stage expectations-competence model in Table 5 (produces much smaller and non-systematic errors with a noticeably smaller root mean (0.95 in Table 5 as opposed to 1.21 and 3.50 in Table 3). Put simply, the 3-stage model was far more accurate in predicting what happened in 1994 than either the long-term or the short-term 2-stage model.

GENERATING FORECASTS FOR 1996-1997

What does all of this imply for making forecasts about future movements in UK government popularity? Two broad lessons can, I think, be learned. The first is that political forecasts based on a shorter, relatively recent estimation period are more likely to be accurate than forecasts based on a longer and therefore partly more distant period. In the present context, of course, if competence perceptions are to be included in the forecasting model, short-term estimation is the only option anyway because no long-term data exist. Even without this constraint, however, there is still a strong case for restricting the estimation period to the relatively recent past. Although the evidence is barely more than impressionistic, there is an increasing sense among British political and economic commentators that the very success of Thatcherism in the 1980s, in exposing many areas of British economic life to genuine market competition, lead directly to a new climate of economic insecurity in the 1990s. Table 6 summarises the evidence from one of the few systematic attempts to measure the extent of this new insecurity -which appears to be very considerable indeed. The problem with such data, of course, is that, without some earlier point of reference, it is impossible to establish whether the levels of insecurity recorded are increasing, constant or even decreasing. If we assume, however, that the «new economic insecurity» thesis does have some validity, then it implies a new set of

background conditions which can clearly be held constant by restricting the estimation period to the recent past.

The second main implication of the forgoing discussion concerns the difficulty of deciding which estimation model should be used to forecast movements in Conservative popularity over the next two years. On the face of it, the fact that the 3-stage model produced more accurate post-sample forecasts for 1994 than the 2-stage model could be taken to indicate that the 3-stage model is likely to perform better in 1995-1997. Unfortunately, the choice of models cannot be made quite so easily -and for at least three reasons.

First, it needs to be recognised that each of the forecast popularity scores shown in Tables 3 and 5 has a standard error of roughly 3 percentage points associated with it. Strictly speaking, therefore, each point estimate forecast has a (two standard error) confidence interval of six percentage points either side of it. It follows that all of the forecasts reported in Tables 3 and 5 are within the stipulated forecasting range and that, on a purely statistical basis, we cannot conclude that one model is preferable to the other. This said, the greater predictive accuracy of the 3-stage model is bound to increase its credibility as a forecasting tool.

Second, a significant potential weakness of the 3-stage model is that it encompasses a statistical series -the competence index- that has relatively few major «turning points». The series has certainly been subjected to a marked downward shift (in October 1992) and to a partial recovery (in December 1992). However, as the results in Table 2 indicate, these turning points are modelled as «one-off» dummy variables and accordingly there is no guarantee that the remaining predictor variable in the competence equation -personal expectations- will be capable of modelling any future turning point(s) in the series.

Third, the competence equation in the 3-stage model is neither statistically robust nor particularly illuminating from a substantive viewpoint. Although, as Table 4 shows, expectations exert a significant effect on competence during the 1991-1993 period, as shown below this effect weakened considerably during the course of 1994. The reason for this weakening is shown clearly in Figure 11: the partial recovery in expectations during the summer and autumn of 1994 was not accompanied by an improvement in the Conservatives' competence ratings. When this weak association between expectations and competence is combined with the failure of any other macroeconomic variables to exert any sort of effect on competence, the substantive limitations of the competence equation shown in Table 4 become very clear indeed. Competence is clearly the major influence on

popularity, but competence itself is extraordinarily difficult to explain (and therefore to forecast) statistically.

In these circumstances -where the 2-stage model is not particularly good at forecasting the post-sample period and the 3-stage model has both statistical and substantive limitations- it is tempting to abandon the attempt to forecast the next UK general election altogether. Such a course of action, however, would be unnecessarily timid. A forecasting model is a statement of the analyst's beliefs about the nature of the processes that are operating during her/his estimation period. I am prepared to commit myself to the proposition that something like either the 2-stage or the 3-stage model has operated in the UK during the 1991-1994 period. I am simply unable to determine which is the more plausible. I therefore provide two alternative sets of forecasts -one corresponding to each model. I leave it to the reader, and to future observation, to determine which, if either, is more appropriate.

The forecasting equations that I employ are summarised in Table 7 and 8. The equation specifications are identical to those presented in the relevant parts of Tables 2 and 4. The estimation is conducted for a longer sample period (January 1991-November 1995). Although there are minor variations, the reported coefficients in Tables 7 and 8 are similar to the equivalent ones shown in Tables 2 and 4.

In order to produce forecasts of Conservative popularity, of course, it is first necessary to make assumptions about changes in the exogenous variables specified in the models. In both the 2-stage and 3-stage models, there are only two wholly exogenous variables: changes in real interest rates and changes in taxation. It should be recalled that other candidate predictors were included in the initial model specifications but that no other independent variables yielded significant coefficients. There is no reason to suppose, therefore, that changes in other macroeconomic variables would affect any of the endogenous variables in either of the models. This absence of other predictor variables is a measure of the present Conservative government's lack of room for politico-economic manoeuvre. The only effective macroeconomic levers that it can pull in order to maximise its own prospects of re-election are to attempt to reduce either real interest rates or taxes -or both.

Economic and political realities, however, are likely to prevent the Chancellor from cutting either real interest rates or taxes to the extent that would be necessary to achieve a sustained recovery in the Conservative party's poll

ratings. Real interest rates in the year to August 1995 were approximately 4%. Moreover, given the likely reaction of the currency markets, however, progressive real rate reductions in excess of 2 percentage points would appear to be financially impossible. Thus, the government's interest rate lever -which it pulled so effectively in the run-ups to the 1983, 1987 and 1992 general elections, is severely constrained. There is perhaps a little more leeway in terms of possible tax reductions. The government was obliged to increase taxation significantly in 1993 and 1994. It clearly hopes that public finances will be sufficiently robust by 1996 that significant reductions in taxation can be introduced. Massive tax reductions immediately before an election, of course, risk being interpreted by voters as electoral bribes that (as in 1992?) would probably be withdrawn almost as soon as the election had been won. It is therefore important, from a political standpoint, to introduce any tax reductions gradually several months before it is intended that an election is to be called.

With these constraints in mind, I make the following assumptions about real interest rate and taxation reductions over the next 2 years.

(1) The government has a target date for the next election already in mind. Given the government's current low standing in the polls, I assume that it will want to delay an election as long as possible. (At the same time, however, if the government waits until the last possible moment -May 1997- it risks losing all freedom of manoeuvre if an unforeseen crisis arises). Nonetheless, I assume that the government's current target date for holding the next election is April 1997.

(2) The government recognises that the effects of any real interest rate or tax reductions that it makes will take time to feed through to voters' political preferences. The lags and discount rates in the various models specified in Table 7 suggest that the full effects of these changes take at least 3 months to work through.

(3) The government recognises that any interest rate or tax reductions have to be made gradually over a period of at least 6-9 months prior to the target election date in order to persuade voters that any resultant improvement in their economic perceptions is relatively durable. (Massive tax and/or real interest rate reductions in the month or two before an election could not be presented as anything other than the most crass political manipulation and would almost certainly be counterproductive).

(4) In accordance with the logic of assumptions (1)-(3), the Chancellor initiates a surreptitious policy of progressive real interest rate reductions from the beginning of 1996. Either by reducing nominal rates or by allowing inflation to rise while nominal rates are held constant, real rates are reduced by two percentage points between January and December 1996.

(5a) In accordance with the logic of assumptions (1)-(3), the Chancellor initiates a surreptitious series of tax reductions in November 1995 which follow a similar pattern as the tax reductions that Chancellor Lamont introduced in the 18 months before the 1992 election. In terms of the taxation index employed here, this involves reducing taxation to a score of -1 by January 1997.

(5b) In accordance with the logic of assumptions (1)-(3), the Chancellor initiates a surreptitious series of tax reductions as in (5a) above, but between November 1995 and January 1997 s/he introduces a sufficiently large tax cut to reduce the taxation index to the lowest level achieved under Nigel Lawson (in April 1988) when the taxation index stood at -2.2.

Table 9 reports the simulated results of applying these assumptions to the two forecasting models shown in Tables 7 and 8. The simulations, if they have any validity at all, provide depressing news for the Conservatives. If the 2-stage model is to be believed, even on the most generous assumptions about tax and interest rate reductions (that is, assumptions 4 and 5b) the Conservatives' forecast popularity rises no higher than 36%. This is over 7 percentage points short of the 43% target needed to ensure re-election. If the more cautious 3-stage model is employed, however, forecast popularity rises to just above 31% on assumption 5b and reaches under 30% on assumption 5a. Such levels of support, if they were actually to be attained, would in all probability leave the Conservatives with less than 150 seats in the next Parliament.

A final set of simulated results is provided in Table 10. The figures reported assume that, regardless of what happens to real interest rates, the government is able (by whatever devices) to raise the level of aggregate personal expectations to a score of +5 -an expectations level equivalent to that achieved in June 1983²¹. On this assumption the 3-stage model predicts a Conservative vote share of 33% if taxation can be reduced to 1992 levels and of 34.2% if taxation can be reduced to 1988 levels. The 2-stage model, on the other hand, predicts 39% under 1992 taxation assumptions and fully 41% if taxation can be brought down to the levels voters enjoyed in 1988. Before Conservative supporters clutch at these latter two statistical straws, however, it should be emphasised (a) that

there is no *evidence* to suggest that expectations will rise as high as +5 points in the run-up to 1997; and (b) that the expectations-government popularity relationship may itself have been fractured by the failure of the Conservatives, in the wake of the ERM crisis, to sustain their reputation for competent economic management.

Moreover, all of these simulated results need to have two very prominent caveats attached to them. First, the macroeconomic assumptions underlying the simulated forecasts may themselves turn out to be inaccurate -in which case, the forecast figures would not be directly relevant anyway. Second, as noted earlier, each of the forecasts has a confidence interval of six percentage points either side of it. In strict statistical terms, the simulated result of 36% referred to above says that the Conservative share of the vote will be between 30% and 42% (Some prediction!). Although it counsels caution, this technical limitation does not mean that the forecasting exercise is valueless. While it is true that we can only be 95% confident, given the specified assumptions, that a popularity forecast of, say, 32% will be associated with an observed popularity score somewhere between 26% and 38%, this is not the only interpretation that can be made of the forecast. Another -and equally valid- interpretation is to regard the 32% «point» forecast as the best guess that we can make, *on the basis of the available empirical evidence*, of the consequences that certain specified macroeconomic changes are likely to have for Conservative popularity. Of all the *possible* consequences of the specified exogenous changes, the point forecast represents the one most likely to occur. The confidence interval represents the size of the «health warning» -and, in the present context, it is clearly a considerable one- that needs to accompany any forecast. The forecasts developed here are not presented as firm predictions of what will happen in the spring of 1997. Rather, they are presented -extremely tentatively- as a loose indication of the sort of recovery in support that the Conservatives can reasonably expect to achieve as their re-election strategy develops over the next year or so.

SUMMARY AND CONCLUSIONS

The condition of the domestic economy exerts a profound influence on the political preferences of British voters -but it does so in a variety of complex and changing ways. During the 1980s and early 1990s, with (as far as we can tell) a clear majority of voters believing in the superior economic management skills of the Conservatives, successive Chancellors were able to pursue macroeconomic strategies -based around real interest rate and taxation reductions- designed to

raise voters' economic expectations in advance of each general election. In 1983, 1987 and 1992, this raising of expectations duly assisted the government in securing re-election.

The relatively stable connections between support for the government and aggregate personal expectations over the 1979-1992 period, moreover, was also rather useful to political scientists. It meant that medium-range political forecasts could be made with some degree of confidence. The government could raise expectations by manipulating real interest rates and taxation; it would almost certainly attempt to do so; and if it made the right sort of reductions in both, it could expect to increase its support by a specified amount.

Due to a complex set of factors which are probably impossible to model given the sort of time-series data currently available, it is possible that the expectations-government popularity relationship of the 1980s has weakened significantly in the mid 1990s. Voters' economic perceptions continue to be central to the political fortunes of the government. Since 1992, however, perceptions of economic management competence appear to have mattered more than expectations. It is in this context that both the present Conservative government and political forecasters are encountering difficulties. The Conservatives appear to have lost their reputation for competence as a result of a combination of factors -the length and depth of the 1990-1993 recession; the export-lead recovery which has been unaccompanied by a revival in domestic consumer confidence; and the new climate of post-Thatcherite economic insecurity- which were crystallised in voters' minds at the time of the ERM crisis in September 1992. The government apparently has little sense as to how it can revive its previous reputation for managerial competence. And it is here that the problems of the government and the forecaster coalesce. It is very difficult to devise a good *statistical* model which explains why that reputation was so dramatically lost in 1992. As a result, the forecaster has no compelling basis for making even contingent forecasts about future movements in the government's competence ratings.

This said, I am confident that, if the Conservatives' competence ratings rise dramatically, the party will enjoy a corresponding recovery in its support. This reflects my conviction that the *explanation* for the Conservatives' current electoral difficulties lies primarily in the loss of their previous reputation for sound economic management. Unfortunately, it is extremely difficult to specify the conditions under which the government's reputation for management competence might be restored.

In these circumstances, the most plausible *forecasts* that can be made are probably those which rely on the continuing operation of the (2-stage) expectations-popularity relationship. Given this assumption, the simulations conducted here suggest that, if the government is able to survive the projected loss of its Commons majority during 1996, then purely on the basis of economic considerations the Conservatives can expect to achieve a popularity rating of around 36% by the spring of 1997. Although this figure is almost 10 percentage points higher than the level currently recorded in the opinion polls, it would clearly not be sufficient to produce a Conservative victory in the next general election.

Table1

Table 1 Long-term Two-Stage forecasting model of government popularity, June 1979-December 1993
$CON = 6.81 (1.26) + .83 CON (.03) + .09PEXP (.02) + .18 TAX (.09) + 9.5 \text{ Falklands-May } (1.73) + 5.82 \text{ Falklands-June } (1.73) + 6.43 \text{ Major } (1.72) + u$
Dickey Fuller test for unit root in residuals = -13.62 LM(12) Serial Correlation test = 11.10 (.45) Ramsey's RESET test for functional form = 0.83 (.36) ARCH (12) conditional heteroscedasticity test = 2.91 (.99) Adj R ² = .91 DW = 2.11 N = 175 Sample: June 1979 - December 1993
$PEXP = -8.26 (2.10) + .80 PEXP (.04) - 1.09 dRIR (.38) + .05 PTRAN (.02) + 12.71 \text{ Falklands-June } (4.63) - 16.1 \text{ Poll Tax } (4.61) + 10.56 \text{ Major } (4.62) + ut$
Dickey Fuller test for unit root in residuals = -13.45 LM(12) Serial Correlation test = 13.16 (.35) Ramsey's RESET test for functional form = 0.65 (.42) ARCH (12) conditional heteroscedasticity test = 5.78 (.93) Adj R ² = .78 DW = 2.04 N = 175 Sample: June 1979 - December 1993
Both equations estimated by OLS. No serially correlated error in either equation. Both equations pass standard CUSUM and CUSUMQ tests. Standard errors in (round) parentheses. Significance levels in (square) parentheses. CON = Conservative popularity; PEXP = Aggregate personal economic expectations; dRIR = change in real interest rate; TAX = taxation index; dTAX = change in taxation index; PTRAN = property transactions index; Falklands-May = dummy for May 1982; Falklands-June = dummy for June 1982; Poll Tax = dummy for March 1990; Major = dummy for December 1990. Full variable definitions provided in Appendix, table A1.

Table2

Table 2 Short-term Two-Stage forecasting model of government popularity, January 1991 - December 1993
$CON = 7.95 (2.01) + .80 CON (.05) + .10 PEXP (.02) - 4.04 TAX (.91) + u$ Dickey Fuller test for unit root in residuals = -5.70 LM(12) Serial Correlation test = 11.15 (.52) Ramsey's RESET test for functional form = 0.01 (.91) ARCH (12) conditional heteroscedasticity test = 9.42 (.67) Adj R ² = .95 DW = 1.75 N = 36 Sample: January 1979 - December 1993
$PEXP = -.80 (1.19) + .998 PEXP (.09) - 5.27 dRIR (1.71) + ut$ Dickey Fuller test for unit root in residuals = -4.78 LM(12) Serial Correlation test = 12.80 (.38) Ramsey's RESET test for functional form = 1.84 (.17) ARCH (12) conditional heteroscedasticity test = 8.97 (.71) Adj R ² = .79 DW = 1.57 N = 36 Sample: January 1991 - December 1993
Both equations estimated by OLS. No serially correlated error in either equation. Both equations pass standard CUSUM and CUSUMQ tests. Standard errors in (round) parentheses. Significance levels in (square) parentheses. Note: the conservative popularity equation exhibited a restricted AR(3) process in the residuals. This sort of problem is not unusual with such a short time series. Re-estimation of the model using Maximum Likelihood with a restricted AR(3) yields:
$CON = 8.84 (1.64) + .77 CON (.04) + .12 PEXP (0.2) - 4.19 dTAX (.75) - .35u + u$ These ML results are very similar to the OLS results reported above. They produce forecasts for January-November 1994 that are similar to those reported for the short-term model. The expectations equation yields a coefficient of near unity on the lagged endogenous variable. This suggests that the model can be re-estimated more efficiently as a simple first-difference specification. This yields:
$dPEXP = -.78 - 5.28dRIR + u$ Dickey Fuller test for unit root in residuals = -4.79 LM(12) Serial Correlation test = 11.62 (.47) Ramsey's RESET test for functional form = 0.00 (.965) ARCH (12) conditional heteroscedasticity test = 9.00 (.70) Adj R ² = .22 DW = 1.57 N = 36 Sample: January 1991 - December 1993 This specification produces virtually identical post-sample forecasts

Table3

Table 3 Accuracy of Post-Sample Forecast for January-November 1994 Based on the Forecasting Models Shown in Tables 1 and 2					
Date 1994	Observed popularity	Long-term model forecast, estimated for 1979-1993	long-term model residual	Short-term model forecast, estimated for 1991-1993	Short-term term model residual
January	27.3	26.5	+0.8	25.7	+1.6
February	26.3	26.4	-0.1	25.3	+1.0
March	25.9	26.6	-0.7	25.3	+0.6
April	26.5	26.9	-0.4	24.8	+1.6
May	25.1	27.3	-2.2	23.9	+1.2
June	23.5	27.8	-4.3	24.1	-0.6
July	24.9	28.2	-3.3	23.7	+1.2
August	23.0	28.7	-5.6	23.7	-0.7
September	24.8	29.1	-4.2	23.9	-0.9
October	24.2	29.4	-5.2	22.6	-0.5
November	24.8	29.7	-4.9	27.8	-2.2
Root mean of sum of Squares of prediction errors			3.50	1.21	
Predictive failure test F(11,168).64 (p=.79) F(11.32).89(p=.56)					

Table4

Table 4 Short-term Three-Stage Forecasting Model of Government Popularity January 1991-December 1993
$CON = 10.96 (2.74) + .68 CON (.08) + .11 MANAG (.03) - 3.41 dTAX (.91)$
Dickey Fuller test for unit root in residuals = -4.20 LM (12) Serial Correlation test = 9.22 (.68) Ramsey's RESET test for functional form = 1.31 (.25) ARCH (12) conditional heteroscedasticity test = 4.39 (.97) Adj R ² = .95 DW = 1.34 N = 36 Sample: January 1991 - December 1993
$MANAG = 1.61 (.57) + .85 MANAG (.04) + .21 PEXP (.05) - 19.4 ERM (2.90) + 9.37 ERM (2.58) - .40 u (.20) - .41u(.20) + u$
Adj R ² = .97 DW = 1.99 N = 35 Sample: February 1991 - December 1993
$PEXP = -.80 (1.19) + .998 PEXP (.09) - 5.27 dRIR (1.71) + u$
Dickey Fuller test for unit root in residuals = -4.78 LM (12) Serial Correlation test = 12.80 (.38) Ramsey's RESET test for functional form = 1.84 (.17) ARCH (12) conditional heteroscedasticity test = 8.97 (.71) Adj R ² = .79 DW = 1.57 N = 36 Sample: January 1991 - December 1993
All equations estimated by OLS. No serially correlated error in either equation. Both equations pass standard CUSUM and CUSUMQ tests. Standard errors in (round) parentheses. Significance levels in (square) parentheses.
MANAG = Relative Economic Management Competence of Conservatives versus Labour. The index is taken from Gallup's regular monthly question: "With Britain in economic difficulties, which party do you think could handle the problem best - the conservatives under Mr Major or Labour under Mr Blair?". The index is constructed by subtracting the percentage of respondents who specify Labour from the percentage specifying the conservatives.

Table5

Table 5 Accuracy of Post-Sample Forecasts for January-November 1994 Based on the Forecasting Model Shown in Table 4			
Date 1994	Observed	Predicted	Residual
January	27.3	27.3	+0.3
February	26.3	26.9	-0.6
March	25.9	26.7	-0.8
April	26.5	26.1	-0.4
May	25.1	25.4	-0.3
June	23.5	25.4	-1.9
July	24.9	25.0	-0.1
August	23.0	25.0	-2.0
September	24.8	25.1	-0.3
October	24.2	24.8	-0.6
November	24.8	24.0	+0.8
Root Mean of Sum of Squares of Prediction errors			0.95
Predictive failure test		F(11,32).64(p=.78)	

Table6

Table 6
UK voters' perceptions about economic insecurity, December 1994

Question: There is a lot of talk at the moment about "economic insecurity", the feeling that people don't know whether their jobs, earning or homes are safe or not. From your own personal experience, do you think a lot of people are feeling economically insecure or not?

Yes, a lot of insecurity -> 93%

No, not a lot -> 4%

Don't know -> 2%

Question: do you feel economically insecure or not?

Yes, I feel insecure -> 61%

No, I don't -> 37%

Don't know -> 2%

Question: From what you know, are most of the new jobs being created secure jobs with long-term prospects or are they short-term and temporary jobs without any real prospects?

New jobs secure with long-term prospects -> 3%

Short-term temporary without prospects -> 86%

Don't know -> 11%

Question: Are you, or is any member of your family out of work at the present time?

Yes -> 31%

No -> 0%

Question: Do you think your present job is safe or do you think there is a chance you may become unemployed?

	Safe	Chance of Unemployment
1982	66	29
1985	61	33
1991	63	31
1994	59	36

Source: Gallup, reported in Daily Telegraph 12/12/94

Fieldwork: Nov 30th-December 5th 1994 (N=1061)

Table 7

Table 7 Two-Stage Forecasting Model of Government Popularity, January 1991 - November 1995
$\text{CON dTAX} = 4.95 (1.37) + .87 \text{ CON} (.03) + .07\text{PEXP} (.02) - 3 * 1 5 (1.02) + u$
Dickey Fuller test for unit root in residuals = -9.35 LM(12) Serial Correlation test = 7.52 (.82) Ramsey's RESET test for functional form = 0.42 (.51) ARCH (12) conditional heteroscedasticity test = 13.94 (.30) Adj R ² = .96 DW = 2.35 N = 59 Sample: January 1991 - December 1995
$\text{PEXP} = -1.29 (1.11) + .92 \text{ PEXP} (.06) - 3.86 \text{ dRIR} (1.55) + u$
Dickey Fuller test for unit root in residuals = -7.17 LM(12) Serial Correlation test = 15.31 (.22) Ramsey's RESET test for functional form = 0.45 (.50) ARCH (12) conditional heteroscedasticity test = 7.17 (.85) Adj R ² = .80 DW = 1.85 N = 59 Sample: January 1991 - December 1993
Both equations estimated by OLS. No serially correlated error in either equation. Both equations pass standard CUSUM and CUSUMQ tests. Standard errors in parentheses. Significance levels in (square) parentheses.

Table8

Table 8 Three-Stage Forecasting Model of Government Popularity, January 1991-August 1995
$ON = 12.90 (2.48) + .62 CON (.07) + .14 MANAG (.03) - 2.82 dTAX (.95)$
Dickey Fuller test for unit root i residuals = -4.20 LM(12) Serial Correlation test = 8.60 (.74) Ramsey's RESET test for functional form = 0.00 (.99) ARCH (12) conditional heteroscedasticity test = 6.28 (.90) Adj R ² = .98 DW = 1.98 N = 59 Sample: January 1991 - December 1993
$MANAG = .40 (.57) + .93 MANAG (.03) + .11 PEXP(.04) - 21.55 ERM (2.96) + 9.64 ERM (2.82) - .25 u (.13) - .38u(.14) + u$
Adj R ² = .97 N = 58 Sample: February 1991 - August November 1995
$PEXP = -.80 (1.19) + .998 PEXP (.09) - 5.27 dRIR (1.71) + u$
Dickey Fuller test for unit root in residuals = -7.17 LM(12) Serial Correlation test = 15.31 (.22) Ramsey's RESET test for functional form = 0.45 (.50) ARCH (12) conditional heteroscedasticity test = 7.17 (.85) Adj R ² = .80 DW = 1.85 N = 59 Sample: January 1991 - November 1995
All equations estimated by OLS. No serially correlated error in either equation. Both equations pass standard CUSUM and CUSUMQ tests. Standard errors in (round) parentheses. Significance levels in (square) parentheses.

Table9

Table 9
Conservative popularity forecasts for April 1997*

Two-stage expectations-popularity model (source: table 7)

Assumption A -> 33.5%

Assumption B -> 36.0%

Three-stage expectations-competence-popularity model (source: table 8)

Assumption A -> 29.6%

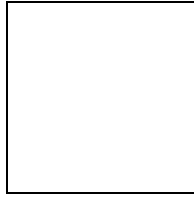
Assumption B -> 31.0%

Assumption A: real interest rates are reduced by 2 percentage points and taxation is reduced as in the 18 months before the 1992 general election.

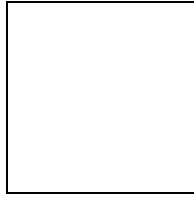
Assumption B: real interest rates are reduced by 2 percentage points and taxation is reduced during 1996, to the levels achieved by Nigel Lawson in 1988.

***All forecasts assume Conservative support (percent intending to vote conservative, don't know excluded from the percentage base) of 26.5% in december 1995.**

Table10



TableA1



TableA2

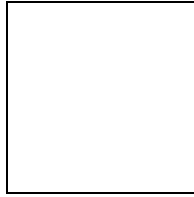


Figure1

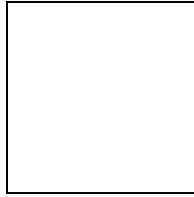


Figure2

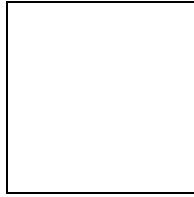


Figure3

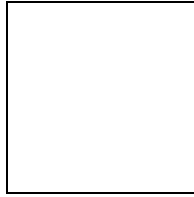


Figure4

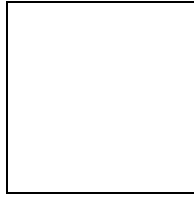


Figure5

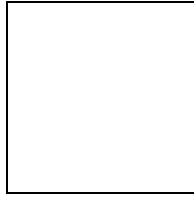


Figure6

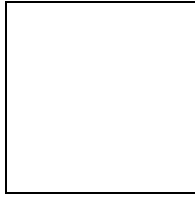


Figure7

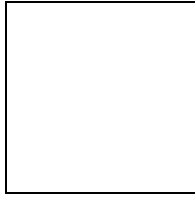


Figure8

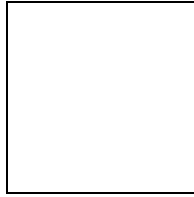


Figure9

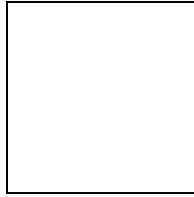


Figure10

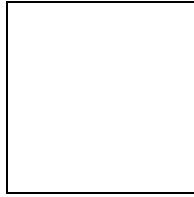
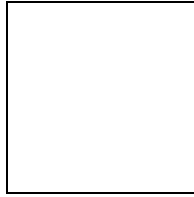


Figure11



NOTES

The paper discusses the prospects for successfully forecasting the outcome of the next UK General election. It focuses on the problem of deciding which estimation period should be used in order to produce a particular set of political forecasts. A series of forecasting equations are developed based partly on different estimation periods and partly on different assumptions about which particular economic perceptions will prove decisive in British politics over the next year or so. Although the precise results of the various forecasting models differ, they all converge on the conclusion that the Conservatives are unlikely to recover sufficiently on the basis of purely economic considerations to win the next general election.

1. The seminal study in the UK was GOODHART, C.A.E. and BHANSALI, R.J.: «Political Economy», *Political Studies*, vol. 18/1970, p. 43-106.

2. See, for example, WILLIAM, Miller and MACKIE, W.M.: «The Electoral Cycle and the Asymmetry of Government and Opposition Popularity», *Political Studies*, vol. 21/ 1973, p. 263-279; PISSARIDES, Christopher: «British Government Popularity and Economic Performance», *Economic Journal* vol. 90/ 1980, p. 569-581; BOROOAH, Vani K. and VAN DER PLOEG, Frederic: «British Government Popularity and Economic Performance: A Comment», *Economic Journal*, vol. 92/ 1982, p. 405-410; CLARKE, Harold, STEWART, Marianne C. and ZUK, Gary: «Politics, Economics and Party Popularity in Britain, 1979-1983», *Electoral Studies* vol. 5/1986, p. 123-141; CLARKE, Harold, MISHLER, William and WHITELEY, Paul: «Recapturing the Falklands: Models of Conservative Popularity, 1979-1983», *British Journal of Political Science*, vol 20/ 1991, p. 63-82; DUNLEAVY, Patrick and HUSBANDS, Christopher T.: *British Democracy at the Crossroads: Voting and Party Competition in the 1980s*. London, George Allen and Unwin, 1985; FREY, B. and SCHNEIDER, F.: «A Politico-Economic Model of the United Kingdom», *Economic Journal*, vol. 88/ 1978, p. 375-394; ALT, James: *The Politics of Economic Decline: Economic Management and Political Behavior in Britain Since 1964*. Cambridge, Cambridge University Press, 1979; NORPOTH, Helmut: «Guns and Butter and Economic Popularity in Britain», *American Political Science Review* vol. 81/ 1987, p. 949-959; NORPOTH, Helmut: «The Popularity of the Thatcher Government: A Matter of War and Economy» in NORPOTH, Helmut, LEWIS-BECK, Michael S. and LAFAY, Jean-Dominique (eds.): *Economics and Politics: The Calculus of Support*. Ann Arbor, University of Michigan Press, 1992; PRICE, Simon and SANDERS, David: «Modeling Government Popularity in Postwar Britain: A Methodological Example» *American Journal of Political Science*, vol. 37/ 1993, p. 317-334.

3. SANDERS, David, MARSH, David and WARD, Hugh: «Government Popularity and the Falklands War», *British Journal of Political Science* vol. 17/ 1987, p. 281-313; SANDERS, David, MARSH, David and WARD, Hugh: «A Reply to Clarke, Mishler and Whiteley», *British Journal of Political Science*, vol. 20/ 1990, p. 83-90; SANDERS, David, MARSH, David and WARD, Hugh: «Macroeconomics, the Falklands War and the Popularity of the Thatcher Government: A Contrary View» in NORPOTH, LEWIS-BECK and LAFAY (eds.): *Economics and Politics, op. cit.*, p. 161-184.

4. SANDERS, David: «Government Popularity and the Next General Election», *Political Quarterly*, vol. 62/ 1991, p. 235-261. CLARKE, Harold, STEWART, Marianne C. and WHITELEY, Paul: «Tory Trends: Party Identification and the Dynamics of Conservative Support Since 1992», *British Journal of Political Science*, forthcoming 1997. It should be noted that Clarke et al's recent work examines the importance of party identifications and leadership factors, as well as economic perceptions, in the determination of party support patterns. I eschew the use of these additional predictors here on the grounds that it is almost impossible at present to generate independent forecasting equations for either identification levels or leadership ratings. If a party's identification ratings increase, or if its leader's ratings rise, then it is hardly surprising if its opinion poll standing improves. The difficult forecasting task is to determine why identification or leadership ratings have improved in the first place: and we currently have no basis for forecasting either of these phenomena.

5. SANDERS, David: «Forecasting the 1992 General Election Result: The Performance of an Economic Model» in DENVER, David et al.: *British Elections and Parties Yearbook 1993*. London, Harvester Wheatsheaf, 1993, p. 100-117.

6. SANDERS, David: «Economic Influences on the Vote: Modelling Electoral Decisions» in BUDGE, Ian and McKAY, David (eds.): *Developing Democracy: Research in Honour of J.P.F. Blondel*. London, Sage, 1992, p. 79-97.

7. The taxation index here is derived from the CSO's tax and price index. It is obtained by subtracting the CSO's price index from the tax and price index.

8. Figure 8 shows the connections between government popularity and aggregate personal prospectives. Over the 1979-1993 period, aggregate measures of (i) personal retrospections, (ii) general prospectives and

(iii) general retrospections all correlate with government popularity to varying degrees (respectively, $r = .51$, $.33$ and $.45$) but none correlates with popularity as strongly as personal expectations ($r = .72$).

⁹ Standard recursive coefficient tests and rolling recursive coefficient tests show that the value of the expectations coefficient remains stable throughout the 1979-1994 period.

¹⁰ Specifically, over the period June 1979 to November 1994:

$$\begin{aligned} \text{CON}_t &= 4.66 + .88 \text{CON}_{t-1} + .06 \text{PEXP}_{t-1} + u_t \\ &\quad (1.40) \quad (.03) \quad (.02) \\ \text{CON}_t &= 4.52 + .88 \text{CON}_{t-1} + .05 \text{PEXP}_{t-2} + u_t \\ &\quad (1.38) \quad (.03) \quad (.02) \\ \text{PEXP}_t &= -7.71 + .80 \text{PEXP}_{t-1} + .16 \text{CON}_{t-1} + u_t \\ &\quad (3.52) \quad (.05) \quad (.09) \\ \text{PEXP}_t &= -3.92 + .85 \text{PEXP}_{t-1} + .07 \text{CON}_{t-2} + u_t \\ &\quad (3.39) \quad (.05) \quad (.08) \end{aligned}$$

where CON is (monthly) Conservative Popularity, PEXP is aggregate personal economic expectations and u_t is random error term. Standard errors in parentheses.

¹¹ SANDERS, David, WARD, Hugh and MARSH, David: «The Electoral Impact of Press Coverage of the UK Economy» *British Journal of Political Science*, vol 23/ 1993, p. 175-210.

¹² SANDERS, David: «Forecasting Political Preferences and Election Outcomes in the UK: Experiences, Problems and Prospects for the Next UK General Election» *Electoral Studies*, vol 14/ 1995, p. 251-272.

¹³ The June 1979 date is chosen because represents the beginning of an extended period of Conservative government. The January 1991 date is chosen because this represents the beginning of a period for which additional economic perceptions data (employed in a subsequent model) are available.

¹⁴ In the context of this paper, I do not enter the protracted debate as to whether timeseries data should invariably be de-trended and how popularity functions should be specified and estimated. I simply note that all of the timeseries employed here can be de-trended by first-differencing; that they can therefore be regarded as a co-integrating set; and that the lagged endogenous variable model which embraces either levels or changes variables is accordingly appropriate for estimation purposes. For general discussion of these issues, see SANDERS, David and WARD, Hugh: «Timeseries Techniques for Repeated Cross-Section Data» in DALE, Angela and DAVIS, Richard B. (eds.): *Analysing Social and Political Change: A Casebook of Methods*. London, Sage, 1994, p. 198-223.

¹⁵ HENDRY, David: «Economics-Alchemy or Science», *Economica*, vol. 46/1980, p. 387-406; HENDRY, David: «Econometric Modelling: The 'Consumption Function' in Retrospect», *Scottish Journal of Political Economy*, vol. 30/ 1983, p. 193-220.

¹⁶ The effects of «unusual events» are, of course, relatively easy to model after they have occurred. It is far more difficult to forecast such effects in advance. Generally, however, the effects on party support of most «events» discount quite rapidly. (With the specifications employed here, the decay rate is defined by the magnitude of the coefficient on the lagged dependent variable). All of the forecasts provided here assume that Conservative support will be unaffected by «unusual events» in the period through to the next general election.

¹⁷ It is important to note in this context that Dickey-Fuller (DF) tests for possible unit roots in the error term are applied to each of the OLS models tested in this paper. (For the rationale underlying these tests, see HARRIS, Richard: *Using Cointegration Analysis in Econometric Modelling*. London, Prentice Hall-Harvester Wheatsheaf, 1995). All of the reported DF tests are above the required critical value, indicating that in each case the null hypothesis of non-stationarity can be rejected -i.e. that the residuals in each equation are indeed stationary. Given that the residuals also pass all the other standard diagnostic tests relating to serial correlation, functional form and heteroscedasticity, it is assumed throughout that there is no need to apply the principles of co-integration theory by using error correction models. On the rare occasions where the OLS specification produces residuals do not pass one of the standard tests, maximum likelihood estimation is employed. This strategy of (a) eschewing error correction models and (b) deploying maximum likelihood methods when OLS assumptions are violated means that the models reported here do not seek to «recover» any long-term equilibrium effects. In the context of the forecasts that are being made here, this limitation is not serious -and for two reasons. First, given the shortness of the forecasting period, it is entirely reasonable to place the main emphasis on specifying and estimating the short-term dynamics of the various relationships involved. Second, it is quite possible that there is no long-term equilibrium (of the sort posited in error correction specifications) between the sorts of attitudinal measures that form the core of the models that are estimated here. This conclusion is certainly supported by the evidence reported below which shows that short-

term estimation models provide more accurate short-term forecasts than their long-term counterparts - suggesting that the relationships among the core attitudinal variables vary over time.

18. The difference in coefficient magnitudes between Tables 1 and 2 in this context reflects the different metrics of the levels and change in taxation variables.

19. The impact of the September 1992 ERM crisis was initially modelled separately using an extensive series of dummy variables. It was clear from this modelling exercise that the initial effect of the crisis was to reduce competence perceptions by roughly 20 percentage points. Within two months, this shock had dissipated somewhat, with competence rising in December by around 10 percentage points. Thereafter, the competence ratings stabilised -some 10 points lower than they had been prior to the crisis. The ERM terms in the equation in Table 4 accordingly refer to dummies on October and December 1992.

20. The reported equations are derived using the same Hendry general-to-specific methodology employed for Table 1, with the same set of candidate predictors (unemployment, inflation, disposable income, interest rates, taxation) being included in the initial model specification for each equation.

21. This assumption may not be implausible. During the course of 1996, the first generation of TESSA savings plans are set to mature; at least one merger between major building societies is planned; and one prominent society may become a bank. All of these developments can be expected to raise their beneficiaries' disposable incomes and thereby to raise the overall level of aggregate personal expectations in unpredictable ways -and independently of any changes in expectations that derive downward movements in real interest rates.