

Macro-Competence: A Measurement of Mood in Issue Competence and a Test of its Effects on Party Support

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Abstract

Despite an important literature on issue ownership – identifying specific policy strengths to different parties – we posit that issue competence ratings exhibit a significant and important degree of common variance. When parties lose or gain ratings on one issue, they also tend to lose or gain ratings on others, suggesting that issue competence can be conceptualised as a global issue evaluation akin to an issue competence mood, or ‘macro-competence’. Using Stimson’s (1991) dyadic ratios algorithm, and an extensive dataset of aggregate opinion poll measures, we reveal the dynamics of macro-competence by party over six decades of British politics, between 1950 and 2005. The factor loading of specific poll questions determines which issues are associated with wider increases and decreases in public competence evaluations of particular parties. Furthermore, we estimate the effects of macro-competence on party support, and find significant effects in greater magnitude than existing aggregate predictors of vote. We conclude that our measure of macro-competence has the potential for conceptual and explanatory application in electoral and public opinion studies in Britain and in other countries.

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The competence of candidates and political parties matters to political competition. Public disillusionment with the policies and competencies of parties to handle problems facing the country can lead to sudden erosions of support. Conversely, positive ratings on the most important issues of the day have been shown to exhibit decisive electoral consequences. In the presidential election campaign of 2008, the rapid rise onto the agenda of the global financial crisis led to growing doubts about the competency of Senator John McCain on the economy and the handing of an advantage to Barack Obama. Parties and candidates focus their campaigns on persuading voters that the issues on which they are most trusted are those that should be central to voter's decisions. When a party loses a reputation on an issue, they try to push the issue down the public's issue agenda. These ideas are central to the issue ownership theory (Petrocik 1996; Petrocik et al. 2003), the saliency theory (Budge and Farlie 1983; 1987) and to Riker's (1993) the dominance/dispersion principle.

Despite the importance of these theories to party competition, little attention has been given to the structure and the dynamics of the ratings of parties across the issue agenda. Are party ratings on owned issues less likely to show variation than party ratings on other issues? To what degree are party ratings subject to the same variation across the issue agenda? Which issues are most fundamental to the prevailing public evaluation of parties' competence? These questions are important, not only for our understanding of public opinion, but also for understanding the agendas of political parties. If parties own an issue, they can campaign on that issue in good times and in bad. If parties gain (or lose) advantages across the issue agenda, then these fluctuations are indicative of broader fluctuations in perceived competencies, suggesting that even owned issues may become unfavourable for parties in certain periods, driven by underlying trends. If certain issues are most strongly associated with a general perception of competence then these issues should be central to parties' strategic choices, and such considerations may provide an important and yet overlooked component of party strategies and the effects of issues on vote choices.

We expect issue ratings to vary in a common direction, indicative and consistent with the concept of a public 'mood' about which party is more or less able to handle the issues or

policy problems that concern the public. This concept, which we name ‘macro-competence’, is explored in the paper and estimated with Stimson’s (1991) ‘dyadic ratios algorithm’, using a range of issue handling and policy performance measures, across the issue spectrum. The algorithm has been used to generate aggregate estimates of public left-right policy preferences across time in both the U.S. (Stimson 1991; Stimson et al. 1995; Erikson et al 2002) and in Britain (Bartle et al. n.d.) and has since been used by a number of other political scientists to construct indices that tap common variance in public opinion (e.g. Durr et al. 1997; 2000; Freeman et al. 1998; Chanley et al. 2000; Kellstedt 2000; Erikson et al. 2002; Keele 2005; 2007; Jennings 2009). This method of analysis and conceptual application has not been applied to the question of issue or policy competence in studies to date.

We find that macro-competence exhibits clear alternation, with government, indicative of cycles in incumbency in Britain (Merrill 2008; Merrill n.d.). Furthermore, it reveals considerable cross-issue and cross-party covariance, and common variance between owned and non-owned issues alike. When political parties lose their competence advantage on particular issues this is often symptomatic of a more general malaise in performance-based evaluations. Such generalized effects are not an artefact of macro-partisan bias, but reflect common underlying variance inherent to macro-competence.

The paper also seeks to determine the substantive significance of macro-competence by exploring vote outcomes or consequences. Using a full range of aggregate level indicators, macro-competence outperforms many often-cited explanations of party support, suggesting that it is an important indicator of electoral change in aggregate analyses of vote choice. The analysis of macro-competence provides further evidence of the effect of negative feedback in maintaining the long-run equilibrium of policy and public opinion in political systems (e.g. Wlezien 1995; 1996; Erikson et al. 2002; Soroka and Wlezien 2004; 2005; Jennings 2009; Jennings and John 2009). It supplements the literature that argues that electoral outcomes and public opinion exhibit cyclical patterns (e.g. Schlesinger 1986; Stimson 1991; Erikson et al. 2002; Merrill et al. 2008), and suggests that long-term changes in macro-competence can improve our understanding of electoral outcomes in Britain, and beyond.

Expectations about Issue Competence and Issue Ownership

The concepts of issue ownership and issue competence have received a significant amount of attention in recent years, partly due to scholars focusing on the more proximate factors of candidate issue ratings in the funnel of causality (Green-Pedersen 2007; Bellucci 2006), and partly because scholars note the relative difficulties faced by candidates in shaping voter preferences versus the relative ease with which candidates shape the issue agenda (see Druckman 2004; Hayes 2005; Holian 2004; Jacobs and Shapiro 1994). Issue ownership theories (see Budge and Farlie 1983; 1987; Petrocik 1996; Petrocik et al. 2003; Riker 1993)¹ expect parties to shift agendas onto issues on which they have a relative strength – those they may own, and to downplay issues on which opponents have an advantage. Ownership arises from the long-term commitment and association of a party to an issue, so that left-of-center parties tend to be trusted on issues such as social welfare and unemployment, and right-of-center parties tend to be trusted on moral issues, and issues such as defense. This theory has also been extended to the ownership of personality traits (Hayes 2005) where left-of-center candidates are expected to own compassion and empathy, and right-of-center candidates are thought to be strong leaders and more moral. Issue ownership and trait theories can be distinguished from studies of issue competence (Green and Jennings n.d.; Bellucci 2006) although in most cases candidates are considered competent on the issues that they own. A candidate could gain a short-term competence advantage but the expectations regarding issue emphasis will remain the same: a party or candidate should emphasize issues on which he or she is most trusted and downplay issues on which the opponent is most trusted on the issue.

To date, the main foci of exploration in the field of issue competence and ownership has been to explore the degree to which candidates diverge or dialogue on issues emphasized (see Simon 2002; Sigelman and Buell 2004), and the degree to which candidates are rewarded at the ballot box when their owned issues are high on the agenda (Green and Hobolt 2008; Holian 2006; Petrocik 1996). These studies provide significant support for the issue

¹ Note that these theories share theoretical bases and empirical expectations but have been called issue saliency theory (Budge and Farlie 1983), issue ownership theory (Petrocik 1996) and the dominance/dispersion principle (Riker 1990). Therefore we label them ‘issue ownership theories’.

ownership theory, but also highlight important caveats; most clearly that issue dialogue or convergence is more common than expected (Damore 2005; Petrocik et al. 2003; Sides 2006; Sigelman and Buell 2004; Simon 2002). However, there is one key assumption of these theories which has not been tested, which is the degree to which owned and non-owned issues are empirically distinct. Existing studies tend to derive a parties' ownership of an issue by the revealed patterns of issue emphasis, or by common assumptions, or they measure the competence advantages of parties across issues using contemporaneous opinion poll data. These analytic approaches do not provide understanding of the empirical basis for ownership, whether ownership ratings are stable, or whether owned issues (or other issues) most heavily load onto a generic evaluation of party competence.

According to existing assumptions, we should expect a candidate's ratings on owned issues to be stable, whereas ratings on other issues should be susceptible to change. What is ownership if it is not stable, relative to other issues? And yet this assumption may be too simple given extant literatures from other sub-fields. Studies exploring the driving force of leader evaluations would suggest that a popular or unpopular candidate could improve or worsen parties' ratings on a broad set of issues. Likewise, with significant economic shocks or effects, we may expect voters to re-evaluate their expectations for competence across owned issues and non-owned issues alike. Furthermore, studies exploring the endogenous nature of candidate or party evaluations would imply that issue ratings are, at least, in a reciprocal causal pattern driven by party choice (van der Eijk et al. 1997), and if we consider the findings of low knowledge political systems, we would expect voters to transfer their ratings on issues for which they have high information (e.g. a parties' owned issues) to issues for which they know relatively little about which party is most competent. True, the concept of issue ownership implies that on these issues, leader effects or economic shocks will have less impact, there will be reduced effect of partisan bias, and it is precisely a party's ownership of an issue which provides a higher amount of reliable information. Nevertheless, our expectation remains that competence evaluations across all issues should exhibit common variance. This common variance may account for a blurring of the expectations of issue

ownership theories, such as high propensities for issue trespassing (Norpoth and Buchanan 1992; Sides 2006), whereby candidates focus on the owned issues of others. These incidences of issue trespassing or issue dialogue could be explained by unobserved variations and commonalities in owned and non-owned issues alike, or to a common recognition that some issues drive the macro-competence evaluations of both parties to a greater extent than others.

We expect all issue ratings to reflect a generalized perception or a ‘public mood’ for which party is best or least able to handle the issues of concern to voters, but the mean level of ratings on owned issues to be naturally higher. For example, as the Conservatives lost their evaluations for competence on the economy, when Britain was forced out of the Exchange Rate Mechanism in September 1992 (combined with several compounding difficulties for John Major’s Conservative Party relating to sleaze and disunity), the party’s ratings on a range of issues fell in similar fashion, but its traditional issues remained relatively higher (see Green 2009). Conversely, when a party’s ratings are much higher, a party’s ‘best issues’ or ‘positive issues’ will increase in tandem with others. As Barack Obama’s popularity rose during the 2009 presidential campaign, his ratings on all issues saw a commensurate rise, with traditional Democrat issues reaching the highest issue ratings overall.² We therefore suggest that the issue ownership theory draws overly simplistic expectations about the relative advantages of owned issues, and about the narrow range of issues on which a popular candidate may hold an overall advantage in any one election.

In order to explore these expectations, we examine the variation in issue competence item responses across a range of issues and for the main parties in the United Kingdom. The United Kingdom offers a comparison of parties traditionally expected to own certain issues (see Budge and Farlie 1983), so that the Labour party should be the party of unemployment and the National Health Service, and the Conservatives the party of law and order, and of immigration (for example). The United Kingdom also affords a range of data sources that can be compared across the longest possible time period, between 1950 and 2005, and against a

² Source: <http://www.pollingreport.com/wh08.htm>

variety of other aggregate time series measures, namely leader approval, economic performance and public left-right preferences (Bartle et al.'s (n.d.) mood measure).

In order to explore the degree to which issue ratings may vary in common, the following figures 1 and 2 present the proportions of Gallup survey respondents rating the Labour and Conservative parties (respectively) as the 'party best able to handle' the issues of the NHS, defence, inflation and strikes: "...I am going to read out a list of problems facing the country: Could you tell me for each of them which political party you personally think would handle the problem best?". We choose these issues to capture those likely to be associated with the Labour party (e.g. NHS) and those most likely to be associated with the Conservative party (e.g. defence) and issues that either party may have an advantage upon, such as strikes (for which Labour may be viewed as the party to protect workers' rights and maintain labour relations, but the Conservatives the best party to limit striking) and inflation (which may also vary according to economic performance). We expect that an issue such as the NHS exhibits an average advantage to the Labour party, but that even this issue demonstrates common variance with issues such as the 'Conservative issue' of defence.

- Figure 1 about here -

- Figure 2 about here -

Figures 1 and 2 highlight three interesting patterns in the Gallup series of issue handling questions. Firstly, Labour party ratings on inflation, defence and on strikes were lower than those for the Conservatives throughout the period of the 1990s, and those for the NHS were consistently higher. This suggests that Labour 'owns' the issue of healthcare, as expected, but also that the Conservatives appear to 'own' the issues of inflation, defence and strikes, or have a consistent relative advantage. Second, there is clear commonality in the variation in issue ratings across all issues, so that increases in Labour issue ratings on the NHS are mirrored in decreases in Conservative ratings on other issues. Third, Figures 1 and 2 demonstrate that the Conservatives' issue ratings on all issues fell sharply following the 1992

survey, during the period of the 1992 election, the ERM crisis and followed by a series of Conservative disarray. These patterns may be specific to Gallup's question wording, driven by exogenous partisan response, or symmetric patterns of leader evaluations, and so their implications can only be suggestive. However, they lend support to an expectation of generalized competence improvements and losses for the two major parties in British politics, and to a conceptualization of issue competence which takes account of this common variance.

Macro-Competence or Issue Competence 'Mood'

In order to capture this sense of common variance in issue competence, this paper employs the aggregate construct and measure of public opinion 'mood'. Stimson (1991) developed the measure of public policy mood to capture common variance in preferences (see Stimson 2004 for a detailed account). He proposed a methodological solution – the recursive dyadic-ratios algorithm – to enable measurement of a concept highlighted by Kingdon in his seminal book, *Agendas, Alternatives and Public Policies* (1984: 153):

“... The idea goes by different names - the national mood, the climate in the country, changes in public opinion, or broad social movements. But common to all of these labels is the notion that a rather large number of people out in the country are thinking along certain common lines, that this national mood changes from one time to another in discernible ways, and that these changes in mood or climate have important impacts on policy agendas and policy outcomes”.

The national mood is something that people in and around government sense, talk about and act upon. It implies the existence of a general sentiment in public opinion towards the activities of government which is manifested in preferences across a range of issues. If opinion polls represent the aggregate of individual preferences on a specific issue, then mood is the aggregate of individual preferences over the aggregate of issues. Accordingly, parties' competence on issues can also be theorised as a general sentiment of competence mood. When a candidate or government fails on one issue, evaluations on a range of other issues

may move in a similar direction. This is consistent with the idea of thermostatic recalibrations of public opinion in response to incumbent policies (Wlezien 1995; 1996; 2004; Soroka and Wlezien 2005; Erikson et al. 2002). Measurement of the public mood enabled the development of a programme of research in the United States into the effects of mood on political behaviour (Erikson et al. 2002; Stimson 1991; Stimson et al. 1995). It has been used subsequently to tap common variance in public opinion (e.g. Durr et al. 1997; 2000; Freeman et al. 1998; Chanley et al. 2000; Kellstedt 2000; Erikson et al. 2002; Keele 2005; 2007; Jennings 2009) and is used in this paper to extract the global dimension of competence evaluations. The analyses examine the common variance over time of a large number of issues to determine the degree to which party ratings for competence can be conceptualized as an overarching ‘issue competence mood’, and the degree to which some issues may be viewed as ‘owned issues’ for certain parties.

In addition to its theoretical contribution, the measurement of mood overcomes a considerable difficulty, to date, for aggregate-level measurement and analysis of competence. Existing research has been hindered by a lack of comparable survey items, over time, that ask respondents to rate parties on issues in terms of handling, delivery, performance or competence, in contrast to extended data series of aggregate measures of economic expectations and retrospections, leader evaluations, and so on. Stimson’s dyadic-ratios (mood) algorithm is, however, a solution to the problem of missing data – and a solution in circumstances where 85% of all possible values are missing and where the distribution of data is irregular over time (Stimson 2004). The mood index is constructed from the marginals of survey items about specific issues. It estimates the principle underlying dimension of (aggregate) public opinion across all available items, using the ratios of items observed at two or more time points. The algorithm enables the estimation of a continuous measure of macro-competence – derived from a range of different measures, from different survey organisations, observed at different time points – with which it is possible to analyze competence over time and in comparison with existing aggregate time series measures.

The dyadic-ratios algorithm first calculates issue competence mood as an average of the available observations of public opinion that a given party is most competent to handle a particular issue or problem, at period t , through forward and backward recursion of dyadic ratios, then weighted for the degree of common variance of each opinion with mood itself. This is expressed in the form

$$\text{ISSUE COMPETENCE MOOD}_t = \frac{\sum_{i=1}^n \sum_{j=1}^q u_i^2 \times \frac{\text{Competence Rating}_{ij}}{\text{Competence Rating}_{ib}} \times \text{Metric}_b}{n}$$

That is where $i=1$, n is available observations of public opinion that a particular party is most competent or has the best policies to handle a given problem, $j=1$, q is available dyadic comparisons for competence ratings on a specific issue j , b is the base period for the recursive metric, Metric_b is the value of the metric for period b , and u_i^2 is an estimated weight for the common variance of $\text{Competence Rating}_i$ and macro-competence mood. This procedure is used to generate annual estimates of macro-competence for Labour, the Conservatives and the Liberals for the period between 1950 and 2008 ($N=59$). These series are not smoothed like the original Stimson (1991) series because we expect issue competence to exhibit greater variance than left-right preferences and the smoothing aimed at measurement error might also dampen meaningful short-term change in competence evaluations. Stimson's algorithm also estimates the item-scale correlation at solution, which is interpretable as a factor loading of a particular survey question with the underlying mood construct. In other words, it tells us the degree to which the prevailing public mood about party competence is linked to competency on specific issues or problems.

The macro-competence indices are extracted from a total of 2,368 administrations of 181 different questions by five survey organisations (Gallup, Ipsos-MORI, Populus, YouGov, and the British Election Study) about evaluation of competence of political parties to handle particular issues or problems (see Appendix, Table A1, for a selection of the questions). For a question to be included in the mood index it must be asked at least twice. There are often

multiple different questions per topic, due to variations in question wording both *within* and *between* survey organisations. For example, in the 1960s Gallup asked “Which party do you think can best handle the problem, or isn't there much to choose between them, on the issue of strikes and trade disputes?”, and in the 1970s and 1980s asked “Which parties do you think are particularly good at improving labour relations? Any others?”, in the 1970s the British Election Study asked “How well would a Labour government handle strikes?” While the questions all tap similar issue categories, these are included as distinct variables in the mood index due to potential affects of question wording on the mean and variance of observations. The results of item-scale correlation at solution presented later in Table 1 therefore refer to different questions, not different issues. The number of times a question was asked ranged between two (the minimum possible for estimation purposes) and 120 (a regular Gallup question concerning relative Conservative and Labour competence to handle the economy). The mean number of question administrations is equal to 13.1 (with a standard deviation of 16.3). Most of these questions require respondents to choose between Labour, the Conservatives or (in the majority of instances) the Liberals, with the option of a non-response (“none” or “don’t know”).³ For example, a common question format for Gallup was to ask “...Which party do you think can best handle the problem of unemployment?” Some questions specifically ask respondents to distinguish competence from their preferences; such as “...Irrespective of your own preferences, which party do you think would be most likely to give Britain an effective defence?” A small number (N=105) of questions from the British Election Study refer to the issue competence of a single political party (typically that in government). For example, it asked the question “How well has/would the Conservative government handled education?” (with positive competence evaluations the sum of the “Very well” and “Fairly well” categories).

A good proportion of the competence questions (725) relate to the economy (30.6%, of which 180 concern unemployment, 116 taxation and 429 the economy in general). This

³ This means that the Conservative mood index is estimated from 2,301 observations, the Labour index from 2,330 observations and the Liberal index from 2,090 observations.

reflects the dominance of economic competence in the literature. However, the majority of the questions are non-economic (69.4%). The breakdown of issues on which competence questions are asked is reported in the Appendix in Table A1. The questions do not stimulate pure partisan responses, since competence questions from the same month can diverge from vote intention by as much as up to 30%.

Factor Loadings of Specific Survey Items on Macro-Competence

In order to evaluate the degree to which parties have more favourable ratings on some issues rather than others, and to determine the degree to which some issues have a greater role in driving general macro-competence evaluations, item-scale correlations by issue, against macro-competence, are reported in Table 1. These are the most frequent survey items (where the number of time points is 10 or more) and the findings are indicative of general differences in the factor loading of competence in the handling of specific issues onto the generalized competence evaluation of parties (i.e. mood).⁴

- Table 1 about here -

The results in Table 1 first provide insights into differences in issue ownership of specific issues by Labour and the Conservatives in mean values of issue competence ratings on specific issues or problems. Most of these findings are consistent with accepted wisdom about owned issues in British politics, but they merit discussion.

There is little difference between Labour (33.0) and the Conservatives (31.9) in the mean of the macro-competence index for the full period between 1950 and 2008. However, Labour has, on average, a higher mean competence on unemployment, education, health, pensions, trade unions, public transport and housing. These results are entirely consistent with the traditional emphasized issues of the post-war Labour party. The Conservatives, on the

⁴ Note that some of the coefficients for similar questions refer to different time periods, so direct comparisons between some issues are not appropriate in a few instances.

other hand, possess a competence advantage on Europe, defence, taxation and crime. Once again these reflect the traditional issue strengths of the Conservative party and those issues on which the party has campaigned (Green and Hobolt 2008; Green 2009). Interestingly, Labour possesses a higher competence rating on the economy for both Gallup and Ipsos-MORI questions, despite the conventional wisdom that Conservatives hold an advantage on economic management.⁵ The Liberals have little ownership of specific issues, and the means are all below their typical mean level of vote share. These collective findings are interesting, since they suggest that the major parties may have distinct advantages on relatively large numbers of issues. Furthermore, the numbers of issues appear different, by party, and the lack of ownership of issues for the third party, the Liberal Democrats, suggests an important incumbency or delivery effect in the transmission of issue competence evaluations to the public.

Second, the factor loading of specific issues onto macro-competence provide interesting insights on the degree of common variance and, therefore, the underlying structure of generalized competence evaluations for each of the parties. The findings reflect the distinct profiles/agendas of the parties, but are not simply a function of owned and non-owned issues. The strongest loading items for the Conservatives are defence (0.95), economy (Gallup items) (0.91), taxation (0.93), pensions (MORI items) (0.95), crime (0.94), trade unions (0.91) and housing (0.94 and 0.97). Some of these are traditional issues that one might expect to drive overall competence rating of the party (e.g. defence, taxation and crime), while others are not (e.g. pensions, trade unions and housing). The wider evaluation of Conservative performance therefore draws upon issues from a wider spectrum than its traditional issue base. In direct comparison to Labour on the same items, the loadings are also stronger for Europe, defence, the economy and crime, reflecting the traditional importance of these specific issues to wider issue competence evaluations of the Conservatives. The diverse set of specific issues

⁵ This is due, most likely, to the preponderance of the economy survey items for these specific questions (not all economy questions) having been compiled from the 1990s and 2000s, as both Gallup and MORI started regular polling on these particular questions in the 1990s. Prior to that date, regular questions on the economy tended to ask specifically about unemployment or inflation.

associated with macro-competence for the Conservatives therefore indicates that general gains in their performance evaluations are not only attainable from owned issues.

The factor loadings for Labour are more closely aligned with its traditional issues, with the highest correlations observed for unemployment (MORI items) (0.93), education (0.91), the NHS (0.94), housing (0.95) and public transport (0.91). However, taxation also loads quite strongly onto Labour macro-competence (0.94 and 0.84). On a couple of traditional Labour issues Conservative competence loads more strongly: unemployment (Gallup items) (0.87 / 0.76) and health (MORI) (0.89 / 0.65), as an exception to other survey items on these same topics. For Labour, its classically owned issues appear to load slightly more strongly onto its general evaluations. Perhaps the most notable finding is that the factor loading of the MORI question about the best policies for the economy (asked over the period between 1990 and 2007) loads onto macro-competence at 0.00, wholly contrary to expectations about economic voting. This suggests that macro-competence is distinct to variations in evaluations of either party on the economy.

Overall, the findings suggest that parties do have inherent advantages on some issues, and that these are indicative of some inherent ownership advantage. However, the range of variation of highly loading issues also suggests that parties may gain advantages by campaigning on issues beyond their traditional ownership strengths, and the high degree of shared variance across the issue agenda, exhibited in the factor loadings on all issues, denotes that a generalised sense of macro-competence offers a useful tool for understanding the dynamics of issue competence variation by party over time.

If we take this generalised macro-competence by party, and according to the expectations of issue ownership theories, this macro-competence index should improve upon explanatory vote models to significant degree. Recall, also, that the composite issue questions fail to occur consistently over time, and so if we seek to understand the effects of issue competence upon electoral outcomes, this macro-competence index offers the first and best opportunity to compare aggregate time series variation with existing predictors of vote. This is the topic explored in the next section.

Macro-competence and party support

If a party loses positive evaluations across the issue agenda, the electoral impact of these combined ratings should be significant. Conversely, if a party gains an improvement in macro-competence, this benefit should also benefit them at the ballot box. However, as highlighted above, although some issue handling or competence questions have been included in individual voting studies, none have been able to employ a constant measure over time.

In order to evaluate the electoral significance and dynamics of macro-competence, the following Figures, 3 and 4, display the macro-competence index values for each party in the United Kingdom, alongside vote intention, between 1950 and 2005.

- Figure 3 about here -

- Figure 4 about here -

Figures 3 and 4 suggest that macro-competence is closely associated with party support throughout the period under investigation, for both the British Labour and Conservative parties. However, for macro-competence mood to have a relevance to understanding political behaviour, it should play an important role, net of other important factors. The effects of presidential approval (e.g. Erikson and Wlezien 1994; 1996; Wlezien and Erikson 2004) or prime ministerial satisfaction (e.g. Clarke and Stewart 1995; Clarke et al. 1997; 2000; Clarke and Lebo 2003; Lebo and Norpoth 2007), opposition leader ratings (Lebo and Young 2009), economic evaluations (MacKuen et al. 1992; Sanders 1996; 1999; Clarke and Stewart 1995) and macropartisanship (Bartels 2000) are all important determinants of vote choice at the aggregate level. The trends displayed in Figures 3 and 4 cannot disaggregate the electoral impacts of macro-competence from those argued to be of importance in existing scholarship. However, they are indicative of an important relationship.

We estimate the effects of macro-competence against other predictors in an error correction model predicting party support (vote intention) for the time period, between 1950 and 2005. Data is available on macro-competence, leader evaluations, objective economic

conditions, an estimation of left-right preferences, and a measure of macro-partisanship. During this period the Conservatives were in power for 35 years (7 prime ministers, 8 election wins) and Labour was in power for 29 years (5 prime ministers, 7 election wins). There were six alternations of power during this period (in 1951, 1964, 1970, 1974, 1979 and 1997). Further details of each of these data series are presented below.

Vote intention: Data on party support is compiled from polling data from Gallup and Ipsos-MORI. Between June 1943 and March 1999 Gallup asked "... If there were a general election tomorrow, which party would you support?". The reported results also included responses for the follow-up question "... Which party are you most inclined to vote for?" where the initial response had been "don't know", capturing both strong and weak vote preferences. However, this measure was discontinued in 1999. Since August 1979, Ipsos-MORI has asked a similar question about vote intention "... How would you vote if there were a General Election tomorrow?" with the follow-up question "... Which party are you most inclined to support?". To generate a continuous data series for the entire period, controlling for slight differences between these measures due to polling house effects, 726 survey items from Gallup (1950 to 1999) and 361 items from Ipsos-MORI (1979 to 2008) are combined again using the dyadic ratios algorithm. The factor loading of the questions is 0.99 indicating that they are virtually identical. The measure represents a summary percentage measure of vote intention as a dependent variable for each of the three main parties, e.g. Labour vote intention of 33% in month one, 34% in month two, and so on. As an independent variable, lagged vote intention (the error-correction mechanism) represents the combined effects of prior party choice.

Preferences: The data on *left-right* public preferences is taken from Bartle et al. (n.d.). This measure is generated with the same method as the original U.S. public policy mood (Stimson 1991; Stimson et al. 1995; Erikson et al. 2002): it extracts the principle underlying dimension of (aggregate) public opinion from the marginal responses to 441 survey questions relating to domestic policy issues such as tax, spending, unions, abortion and benefits. These measure

the percentage of respondents indicating a preference for 'left' or 'right' options, 'supporting' or 'opposing' proposals, 'agreeing' or 'disagreeing' with statements about society, economics or politics (but excluding questions with references to foreign affairs). For more information on this measure, see Bartle et al. (n.d.).

Prime Ministerial and Leader Approval: Since the late 1930s, Gallup surveyed the public about its satisfaction with the performance of the Prime Minister: "... Are you satisfied or dissatisfied with ... as Prime Minister?" with possible responses of "Satisfied", "Dissatisfied" and "Don't Know". From the 1950s, Gallup also asked the public about its satisfaction with opposition leaders in the form: "Do you think Mr. ... is or is not proving a good leader of the Conservative/Labour Party?" and "Do you think that Mr. ... is or is not doing a good job as leader of the Liberal Party?". From 1979, Ipsos-MORI asked a similar set of questions "... Are you satisfied or dissatisfied with the way X is doing his/her job as Prime Minister?" and "... Are you satisfied or dissatisfied with the way X is doing his/her job as leader of the Conservative/Labour/Liberal Party?". To control for house sampling or question wording effects, these overlapping measures are again combined using the dyadic ratios algorithm, with 846 survey items for the Conservatives (Gallup 530, Ipsos-MORI 326) and 865 items for Labour (Gallup 539, Ipsos-MORI 326) due to the introduction of opposition leader questions after prime ministerial satisfaction questions by Gallup. Each series has a factor loading of 0.99 onto the combined measure indicating that they also measure the same underlying construct.

Objective economic conditions: The 'misery index' is used for this analysis as the measure of economic conditions. This is equal to the sum of the unemployment rate and the inflation rate. Measures of economic prospective and retrospective evaluations (such as are used in Sanders 1996; 1999; Clarke and Stewart 1995) and coincident or leading economic indicators (such as Conference Board data), often used in other analyses of party support, are only available from the 1970s onwards, prohibiting their use in this analysis. The use of the misery index for

annual data is not considered to be problematic, however, since variation in economic evaluations and coincident or leading indicators tend to be more pronounced at the monthly level.

Macro-partisanship: There is no single continuous measure of macro-partisanship in the U.K. This analysis constructs an annual measure of macro-partisanship again using the dyadic ratios algorithm, based on 267 survey items between 1963 and 2007 (with 23 from the British Social Attitudes Survey, 52 from the British Election Study, 53 from Ipsos-MORI, 132 from Gallup, and 7 from Eurobarometer). These refer to questions measuring the percentage of respondents indicating political affiliation to Labour, the Conservatives, Liberals and other parties. For example, since 1963 the British Election Study has asked “Generally speaking, do you see yourself/think of yourself as...?”, with the measure indicating the percentage of respondents answering Conservative, Labour, Liberal or other.

An Error-Correction Model of Issue Competence and Party Support

Since the introduction of error-correction models in econometrics (Davidson et al. 1978), political scientists have adopted the error-correction framework for analysis in a number of different contexts (see De Boef and Keele 2008 for a review); including models of governing and opposition party support (Clarke and Stewart 1995; Clarke et al. 1998; 2000), the public mood (Durr 1993; Erikson et al. 2002), trust in government (Keele 2007), and policy-opinion and agenda-opinion dynamics (Jennings 2009; Jennings and John 2009). This model specification is also consistent with previous work on issue ownership and party support (Green and Jennings n.d.).

Single equation error-correction models with vote intention as the dependent variable enables a comparison of the short- and long-run effects of macro-competence and other predictors on party support. If there is a deviation from the equilibrium, as vote intention diverges from issue competence or leader approval (for example), the error-correction parameter captures the rate at which the relationship between vote choice and the vote

predictor is restored to its earlier status quo. The value of the parameter should, by construction, be negative and between 0 and -1. The closer this value is to -1, the stronger the rate of correction. This captures the direction and strength of corrective feedback between two measures. That is, the degree to which there is a sustained and long-run relationship between the vote predictors and party support. The model also includes a lagged measure of which party is in power to capture thermostatic reactions against incumbents. Taking 1950 as the base year = 0, the value of this variable increases by 1 in years in which there is a Labour government and decreases by 1 in years in which there is a Conservative government.

Short-run changes in vote intention for a given party ($\Delta VOTE_t$) are estimated as a function of short-run changes in macro-competence ($\Delta COMP_t$), left-right preferences ($\Delta PREFS_t$), leader ratings ($\Delta LEADER_t$), and the misery index ($\Delta MISERY_t$), and lagged values of competence mood ($COMP_{t-1}$), preferences ($PREFS_{t-1}$), leader ratings ($LEADER_{t-1}$), and the misery index ($MISERY_{t-1}$), along with a lagged control (GOV/OPP_{t-1}) for whichever party is in power.⁶ The lagged value of vote intention ($VOTE_{t-1}$), the error-correction mechanism, measures the rate of re-equilibration (α_1) in response to shocks to the long-run equilibrium state. It also provides a control for autocorrelation, and the combined effects of prior evaluations over time and likely partisan effects of party choice upon the formation of issue competence ratings.

The model can be represented in the form:

$$\begin{aligned} \Delta VOTE_t = & \alpha_0 + \alpha_1 VOTE_{t-1} + \alpha_2 \Delta COMP_{i,t} + \alpha_3 COMP_{i,t-1} + \alpha_4 \Delta PREFS_{i,t} + \\ & \alpha_5 PREFS_{i,t-1} + \alpha_6 \Delta LEADER_t + \alpha_7 LEADER_{t-1} + \alpha_8 \Delta MISERY_t + \alpha_9 MISERY_{t-1} \\ & + \alpha_8 GOV/OPP_{t-1} + \varepsilon_t \end{aligned}$$

⁶ Taking 1950 as the base year = 0, the value of this variable increases by 1 in years in which there is a Labour government and decreases by 1 in years in which there is a Conservative government. This variable

We also compare the models using lagged vote intention with those using lagged macro-partisanship, $\alpha_1 \text{PID}_{t-1}$, to ensure we are capturing these potential sources of biases, as far as possible. The results of the error-correction models of party support for each of the parties are reported in Table 2.

- Table 2 about here -

The effects of macro-competence on party support are positive and significant at the 99% confidence level for all the parties. The strength of the effect is similar for the Conservatives (0.614***) and Labour (0.534***), suggesting that these parties are affected in much the same way by shifts in macro-competence. The size of effect for the Liberals is, however, much larger and greater than 1 (1.567***). This reflects the fact that Liberal competence ratings are, on average, far lower than party support – so increases (decreases) in their competence ratings lead to disproportionate increases (decreases) in vote intention. The long-run effects of competence are significant at the 95% confidence level for both the Conservatives and the Liberals, but not for Labour. This difference between the parties seems to be counter-balanced by the long-run effects of leader ratings.

Short-run effects of leader ratings are positive and significant for both Labour (and the Conservatives, but not for the Liberals. This is consistent with other studies of Liberal leadership effects (Lebo and Young 2009). The long-run effect of leader ratings are positive and significant for Labour, but not for the other parties (the parameter for the Conservatives is just outside the 90% confidence level but indicates an effect that is half as strong).

Also of interest, the short-run effects of economic conditions are negative and significant (-0.235†) at the 90% confidence level for the Conservatives, indicating that as economic conditions worsen they suffer a decline in support. There are no significant short-

or long-run effects of economic conditions aside from this finding, which denotes an important effect of macro-competence which reduces the effect of the misery index.⁷

The long-run effect of left-right preferences on Conservative and Liberal vote intention is negative and significant at the 90% confidence level. This indicates that as preferences shift to the right, support for these parties increases. This is intuitive for the Conservatives, but of interest for the Liberals, since it suggests that a more right-wing mood facilitates increases in support (perhaps due to an erosion of Labour support that does not flow to the Conservatives). These findings give support to other studies (e.g. Bartle et al. n.d.) finding electoral effects of left-right shifts away from these parties. The long-run effect is not significant for Labour, however, although it is positively signed. None of the short-run effects of left-right preferences are found to be significant. This is as might be expected since these are likely to move more slowly than shifts in party support.

The variable included to test for lagged effects of incumbency do not contribute to declines in party support for either the Conservatives or Labour.

The error-correction parameter is negative and significant at the 95% confidence level for each of the parties. The rate of equilibration in response to shocks is strongest for the Liberals (-0.686***), next strongest for Labour (-0.456***) and least strong for the Conservatives (-0.269*). This indicates that if there is a shock to Conservative vote intention, 73% of the dis-equilibrating shock remains after one year, 53% after two years, 39% after three years, and so on. This suggests that Conservative vote intention is less likely to bounce back if there is a shock to it, perhaps indicating a weaker effect of partisan affiliation.

The diagnostics for the model indicate acceptable parameters. The insignificant Ljung-Box Q-statistics for each of the models indicate that the residuals have been reduced to white noise. There is evidence of serial autocorrelation, significant at the 95% confidence level, in the Conservative vote model. Jack-knifing indicates that this is due to inclusion of

⁷ We run additional robustness checks by regressing the misery index on macro-competence ratings for all the parties in the form: $\Delta\text{COMP}_t = \alpha_0 + \alpha_1\text{COMP}_{t-1} + \alpha_2\Delta\text{MISERY}_t + \alpha_3\text{MISERY}_{t-1} + \varepsilon_t$, using the same error-correction framework. These indicate insignificant short- and long-run effects of economic conditions on macro-competence.

the misery index variable. It is eradicated, however, if the misery index is removed from the model with the same inferences drawn (though the lagged term for preferences ceases to be significant at the 90% confidence level). It is retained for direct comparison of models for each of the parties and does not represent a threat to inference. Note also that tests for heteroscedasticity generate acceptable values (insignificant at the 95% confidence level).

The results of the error-correction models confirm that macro-competence provides a valid, and strong, predictor of party support - with both short- and long-run effects. While there are also positive effects of leadership ratings, and left-right preferences, these are weaker than the coefficients for macro-competence. It is possible that leadership effects and subjective evaluations of past and future economic circumstances are incorporated within the long-run equilibrating relationship, negating or weakening otherwise significant effects of economic conditions on party support. This implies that macro-competence contains some information about leader satisfaction and economic evaluations. However, their effects appear to be subsumed within the measure of macro-competence. These analyses therefore offer support for the application of macro-competence to the understanding of electoral outcomes. This measure provides an important explanatory tool in an aggregate analysis of vote choice.

Sensitivity analysis

We also conduct a number of tests of the robustness of our results. First, if lagged party identification replaces lagged vote in the party support models, this is negative (although not significant at the 95% confidence level) and the inferences drawn for other variables remain the same, indicating that lagged vote exerts a similar effect as partisan identification. Second, we also test the effect of the macro-competence series excluding the Ipsos-MORI about the 'party with the best policies', since this might be interpreted as relating to matters other than competence. The estimation of party support models with the alternate series generates the same inferences on the effects of preferences, macro-competence, leader ratings and objective economic conditions as the original model (with a couple of variables become significant at the 90% confidence level instead of the 95% confidence levels). Use of

the best policies does not, therefore, represent a threat to inference. Third, we re-estimate the models with available data on the Gallup (and later YouGov) measure of ‘personal economic expectations’, as first used in Sanders et al. (1987), in place of the misery index. This question was introduced in 1974, thus restricting our analysis of party support to the period between 1974 and 2005. The substitution of personal expectations for the misery index does not alter the inferences drawn from the model of party support for Labour for the period between 1974 and 2005. There are some changes to the Conservative and Liberal models, however. For the Conservatives, short-run effects of the misery index are significant at the 95% confidence level whereas these are insignificant for personal economic expectations. Also, the short-run effect of preferences and the constant term are no longer significant in the expectations-model. Last, short-run effects of competence are significant at the 90% confidence level rather than the 95% level. For the Liberals, short-run effects of competence are also significant at the 90% confidence level rather than the 95% level. Personal economic expectations have both a short- and long-run negative effect on party support, significant at the 95% confidence level.

Last, the models were further re-estimated with the Engle-Granger two-step method in order to test for weak exogeneity, using residuals from regression of macro-competence against left-right preferences, leader ratings and the misery index, instead of the error-correction component of the model (see Appendix Table A3). The residuals are not significant at the 95% confidence level for all the variables for each of the parties.

Discussion

The concept of a macro-competence mood follows a strong precedent in public opinion studies where the construct has been used to tap common variance in public opinion (e.g. Stimson 1991; Stimson et al. 1995; Durr et al. 1997; 2000; Freeman et al. 1998; Chanley et al. 2000; Kellstedt 2000; Erikson et al. 2002; Keele 2005; 2007; Jennings 2009). This study has used this application to issue competence ratings for the first time, suggesting that parties or candidates’ issue ratings also exhibit common variation, and can be modelled as an

aggregate macro-level predictor of vote choice. Our analysis suggests that this generalized competence rating, or mood, is a very important predictor of electoral choice. It enables an understanding of the effects of issue competence ratings on vote intentions, alongside existing aggregate level predictors, in a way that would not be possible in individual election studies using contemporaneously measures, or using proxies for competence, such as leader evaluations (Clarke et al. 2004). Conceptually, our analysis lends support to the electoral significance of a broad sense of public mood towards which party or candidate is considered most or least competent in terms of the policy domain. This sense of public mood shows a close relationship with vote intention in a simple comparison of the aggregate series, but also in an error-correction relationship taking account of a wide number of aggregate level predictors and of lagged values of vote (and party identification). These findings do not reject the importance of leader evaluations, economic performance, public preferences or government and opposition effects, but they highlight the importance of measuring issue competence at the aggregate level and over time, and of taking these kinds of issue competence evaluations seriously in model estimation.

With respect to party competition, and candidate issue strategies, our findings suggest that parties should be concerned with their overall competence ratings, and should recognise the significance of ratings on owned issues and of other ratings across the issue agenda. As a party's owned issues rise in terms of positive competence evaluations, so other issues may move together in generating a generic sense of competence. Therefore, parties and candidates may need to recognise the pivotal nature of issues outside their existing strengths in recognition of their disproportionate contribution to overall macro-competence ratings.

Whereas popular theories of selective issue emphasis (namely the issue ownership theories of Budge (1983; 1987), Petrocik (1996; Petrocik et al. 2003) and Riker (1993)) argue that parties' issue ratings vary by a candidate's long-term commitment to issues and reputation, and the representation of traditional issue constituencies, the macro-competence construct assumes that many issue ratings vary in tandem. Therefore, we argue for a change of emphasis in the issue competition literature, rather than a challenge to theoretical

orthodoxy, to recognise the conceptual and empirical implications of generalised competence ratings for owned and non-issues alike. This change of emphasis may account for some of the findings of issue ownership studies, where scholars note the likelihood that parties dialogue on issues, or trespass onto the owned issues of other candidates (Damore 2005; Petrocik et al. 2003; Sides 2006; Sigelman and Buell 2004; Simon 2002). The macro-competence findings suggest that candidates may face rational incentives to engage with issues that drive generalized competence ratings. They also suggest that while parties may clearly have advantages on some issues, these advantages (and disadvantages) may show variations that could afford a party a broader issue agenda, according to the overall competence mood.

These findings and implications are by no means confined to the context of the United Kingdom. The issue ownership theory has been generated and extensively tested in the United States (see Petrocik 1996; Petrocik et al. 1996; Simon 2002; Sigelman and Buell 2004; Damore 2005; Sides 2006), in Canada (Belangér and Meguid 2008), the United Kingdom (Green and Hobolt 2008), Italy (Bellucci 2006), and throughout Western Europe (Green-Pedersen 2007). In each of these countries, and across electoral and party system, parties are known to have traditional issue advantages, and issue-based competition is an important feature, both of issue agenda strategies and as a predictor of vote. We posit that the notion of macro-competence can be similarly applied, whereby issue ratings move together in a common direction, and parties and candidates have some issues that drive this macro-competence mood to a greater or lesser extent. This measure of macro-competence may also have a similarly important effect in models of aggregate level vote choice, over time, as data permit scholars to estimate these effects, and with important cross-national applications.

Conclusions

Public evaluation of the competence of candidates and political parties is an essential determinant of political success or failure. Shifts in the prevailing public perception of the ability of parties to handle problems facing the country can lead to decreases (increases) in support. The ownership of particular issues informs the strategies of parties in aligning their

agenda with some issues while disassociating it with others. Ratings of issues competence exhibit a significant degree of common variance, however. When parties lose or gain ratings on one issue, they often tend to lose or gain ratings on others. This suggests that dynamics of issue ownership are structured by a global issue competence evaluation: macro-competence.

We believe our analysis of macro-competence, and the effects we demonstrate on electoral choice, have interesting and important conceptual and empirical implications for understanding party competition and vote choice in the British case but also in comparative context.

Firstly, the observation that issues co-vary, increasing and decreasing by party across the issue agenda should matter for scholars seeking to understand the strategic choices of candidates and parties. If parties benefit from a generalised evaluation of macro-competence, and their owned and non-owned issues become more positive in tandem, then we may expect a wider issue agenda to be made available to parties in positions of popularity, and relatively few issues available to those in positions of weakness. In this case, one party may campaign on many issues, moving beyond traditional ownership strengths, and another may be forced onto a narrow traditional issue domain.

Secondly, if parties' generalised competence ratings influence electoral choice, then rational parties or candidates should give greater weight to those issues that affect this wider perception of macro-competence. Thus, an extension of the issue ownership theory may be to explore, in future, the classic advantages of some parties over others on various issues, taking this as an empirical question, and also those issues that are most important to a general sense of issue competence.

Third, our analysis has enabled the long-term analysis of issue competence ratings upon vote choices, using a consistent measure for this time period for the very first time. Our findings for the effects of macro-competence on vote intentions suggest that this generalised public competence mood has an important effect on electoral choice. These findings are unlikely to be applicable to Great Britain alone, and so optimising existing but inconsistently fielded survey items, using Stimson's (1991) dyadic ratios algorithm, will permit scholars to

estimate better specified vote models using a comparable macro-competence predictor. This estimate of macro-competence in Britain has strong explanatory power in the period between 1950 and 2005, for the Conservative and Labour parties alike.

These implications should be tested using further analyses of macro-competence in other countries and political systems. It is possible that issue ownership theories hold different implications where responsibility for policy delivery is shared – in grand coalitions and shared government. The structure and dynamics of macro-competence might also be different under separation of legislative and executive powers, such as in the U.S., and during periods of divided government. These possibilities have not been explored, but their implications will be important, both for the development and application of issue ownership theories, but also for the association of different issues to parties' macro-competence, and the effects of macro-competence in vote models.

The concept of macro-competence may also be applied to other important research questions, such as the application of macro-competence to explanations of public preference change. A government could pursue a public service policy of large-scale state intervention, or widespread tax increases and spending investments, but public reactions against such policies may be greater when investments show no demonstrable improvements, or failures. Specifically, publics may show greater changes in left-right preferences (public policy mood) when macro-competence becomes less favourable to the incumbent – as an addition to explanations based on economic expectations and performance (Durr 1993; Stevenson 2001). These questions will be the subject of future research.

Despite the importance of theories of issue ownership to party competition, current understanding is still limited of the structure and dynamics of ratings of competence across the issue agenda. When parties gain (or lose) advantages across the issue spectrum, these reflect a broader shift in perceived competencies. It is possible for owned issues to become unfavourable for parties in certain periods when the overall climate is unfavourable. While parties might retreat to their owned issues in hard times, it is difficult for them to hold back the tide of public opinion. If certain issues are more associated with shifts in macro-

competence, the strategic choices of parties must consider not only which issues they possess better competence ratings on, but also whether improvement or maintenance of these ratings will be translated into broader improvements in competence ratings. Conversely, the loss of competence advantages on particular issues often reflects a more general malaise in performance evaluations. These dynamics are not an artefact of macro-partisan bias, since the structure of issue competence reflects real differences in issue ownership between parties and over time. Instead these reflect the common underlying variance that is inherent to macro-competence.

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Figures

Figure 1. Labour Issue Competence, Gallup

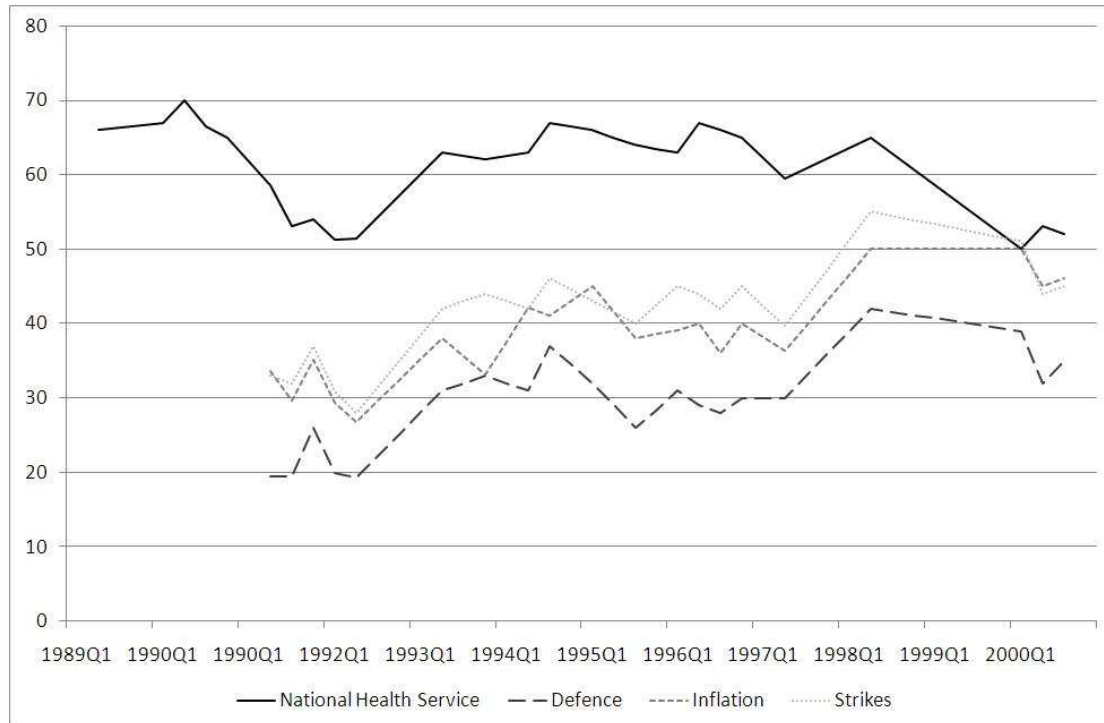


Figure 2. Conservative Issue Competence, Gallup

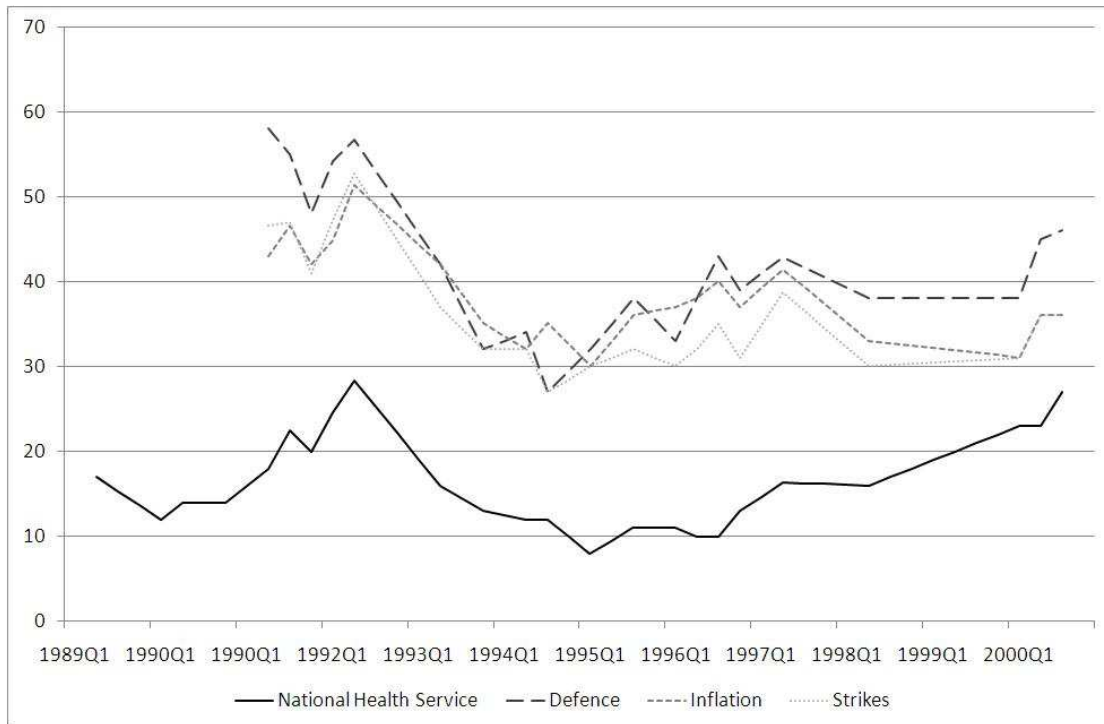


Figure 3. Macro-Competence and Party Support (Conservative)

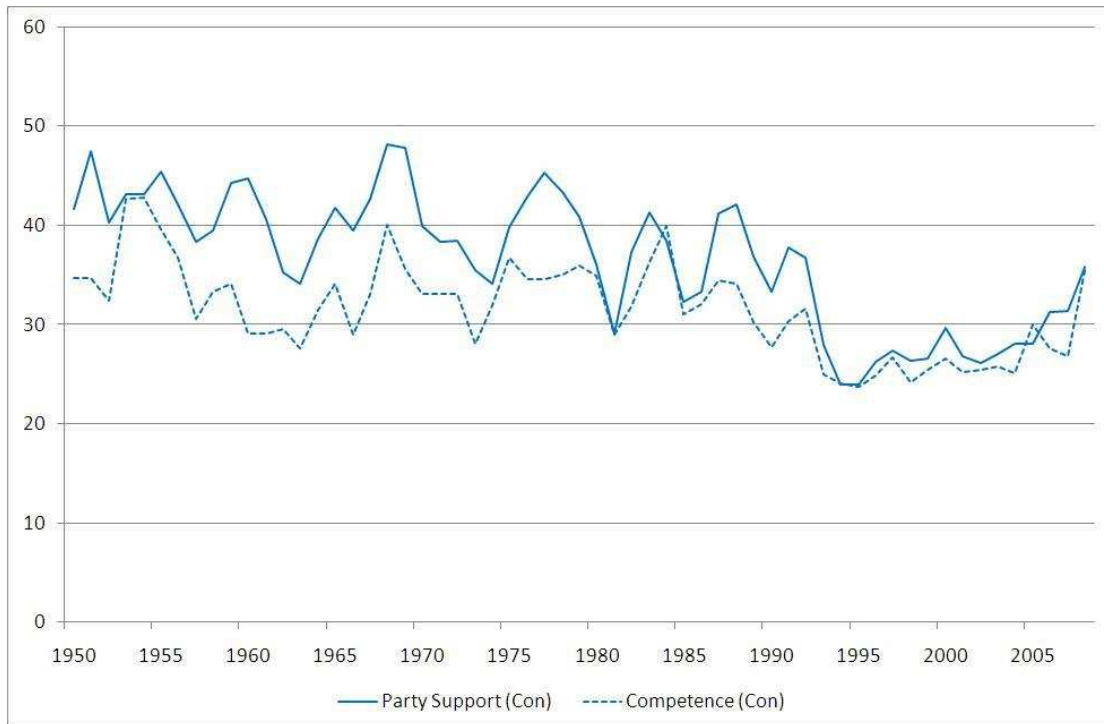


Figure 4. Macro-Competence and Party Support (Labour)

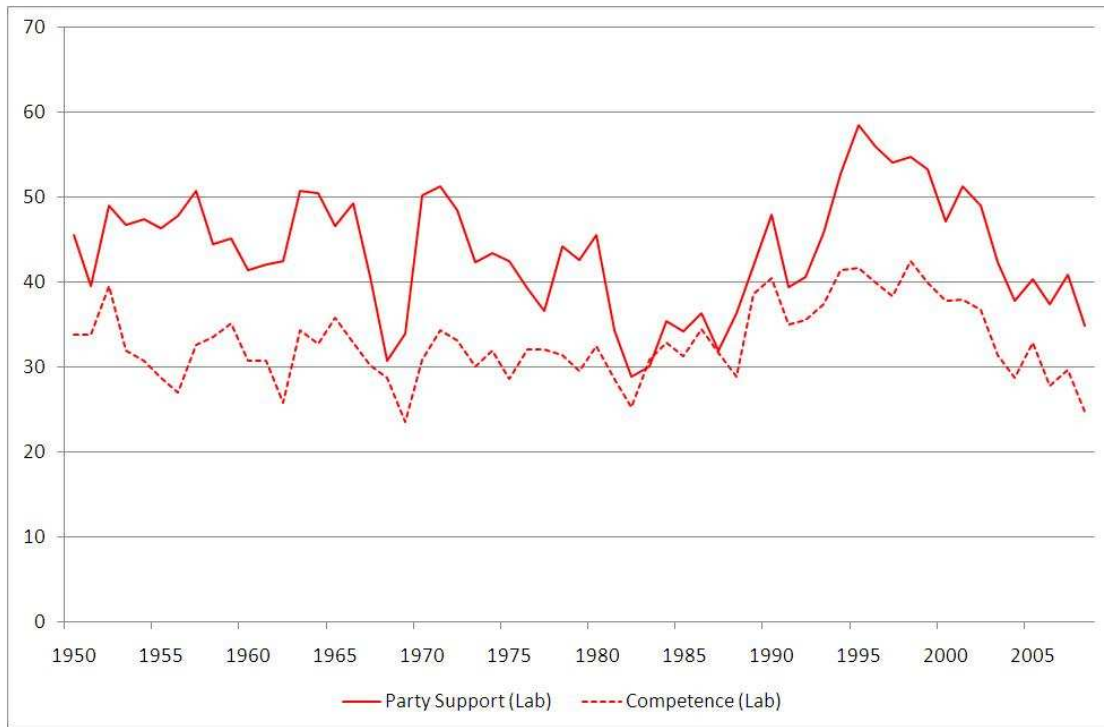


Table 1. Factor loadings of issue ownership on specific issues on macro-competence

| Issue | Question (Pollster) | Conservative | | | Labour | | | Liberal | | |
|--|--|--------------|--------------|-------|--------|--------------|-------|---------|-------------|-------|
| | | n. | Mean (S.D.) | Corr. | n. | Mean (S.D.) | Corr. | n. | Mean (S.D.) | Corr. |
| Common Market | Best Party to Handle the Problem (Gallup) | 10 | 35.2 (4.2) | 0.639 | 10 | 28.0 (4.3) | 0.511 | 10 | 5.1 (3.5) | 0.985 |
| Europe | Party with Best Policies on the Problem (Ipsos-MORI) | 22 | 28.1 (7.2) | 0.86 | 22 | 24.1 (5.8) | 0.617 | 22 | 9.0 (3.9) | 0.784 |
| Defence | Party with Best Policies on the Problem (Ipsos-MORI) | 28 | 34.5 (11.3) | 0.946 | 28 | 23.5 (5.4) | 0.857 | 28 | 5.8 (2.5) | 0.906 |
| Economy | Party with Best Policies on the Problem (Ipsos-MORI) | 17 | 24.6 (7.2) | 0.687 | 17 | 33.7 (6.5) | 0.003 | 17 | 5.9 (2.7) | 0.696 |
| Economy | Best Party to Handle the Problem (Gallup) | 13 | 34.7 (9.3) | 0.906 | 13 | 42.6 (8.5) | 0.702 | n/a | - | - |
| Unemployment | Party with Best Policies on the Problem (Ipsos-MORI) | 27 | 19.1 (8.2) | 0.878 | 27 | 39.2 (8.1) | 0.93 | 26 | 7.9 (4.6) | 0.746 |
| Unemployment | Best Party to Handle the Problem (Gallup) | 11 | 19.8 (4.9) | 0.867 | 11 | 58.7 (5.5) | 0.755 | 11 | 6.0 (1.4) | 0.889 |
| Taxation | Best Party to Handle the Problem (Gallup) | 13 | 34.0 (5.9) | 0.811 | 13 | 36.9 (7.8) | 0.939 | 13 | 7.2 (2.4) | 0.898 |
| Taxation | Party with Best Policies on the Problem (Ipsos-MORI) | 21 | 28.6 (9.0) | 0.939 | 21 | 28.6 (5.8) | 0.835 | 21 | 9.2 (2.8) | 0.828 |
| Education | Party with Best Policies on the Problem (Ipsos-MORI) | 25 | 24.8 (9.5) | 0.866 | 25 | 35.5 (8.4) | 0.911 | 25 | 10.6 (4.1) | 0.89 |
| Environment | Best Party to Handle the Problem (Gallup) | 11 | 18.3 (3.2) | 0.895 | 11 | 31.8 (7.8) | 0.625 | 11 | 15.2 (3.6) | 0.731 |
| Environment | Party with Best Policies on the Problem (Ipsos-MORI) | 18 | 11.5 (4.5) | 0.829 | 18 | 17.4 (4.6) | 0.576 | 18 | 15.9 (4.1) | 0.491 |
| NHS | Best Party to Handle the Problem (Gallup) | 20 | 22.2 (7.8) | 0.885 | 20 | 52.8 (10.4) | 0.935 | 20 | 6.5 (2.8) | 0.925 |
| Health | Party with Best Policies on the Problem (Ipsos-MORI) | 24 | 17.4 (4.9) | 0.884 | 24 | 42.6 (9.5) | 0.65 | 24 | 8.7 (3.1) | 0.899 |
| Pensions | Party with Best Policies on the Problem (Ipsos-MORI) | 16 | 17.2 (3.9) | 0.947 | 16 | 30.6 (9.1) | 0.707 | 16 | 7.4 (2.3) | 0.701 |
| Pensions | Best Party to Handle the Problem (Gallup) | 10 | 23.4 (6.0) | 0.792 | 10 | 51.3 (4.3) | 0.516 | 10 | 6.6 (1.1) | 0.663 |
| Law and Order | Best Party to Handle the Problem (Gallup) | 11 | 37.2 (8.5) | 0.882 | 11 | 35.4 (8.5) | 0.669 | 11 | 7.1 (1.8) | 0.897 |
| Crime | Party with Best Policies on the Problem (Ipsos-MORI) | 28 | 34.2 (10.8) | 0.939 | 28 | 23.4 (5.5) | 0.856 | 28 | 5.8 (2.5) | 0.911 |
| Trade Unions | Party with Best Policies on the Problem (Ipsos-MORI) | 21 | 23.5 (9.5) | 0.907 | 21 | 38.9 (6.3) | 0.735 | 21 | 5.5 (3.0) | 0.792 |
| Strikes | Best Party to Handle the Problem (Gallup) | 10 | 35.8 (6.4) | 0.786 | 10 | 42.7 (6.9) | 0.438 | 10 | 5.8 (1.7) | 0.842 |
| Housing | Party with Best Policies on the Problem (Ipsos-MORI) | 21 | 17.6 (8.3) | 0.937 | 21 | 38.1 (8.4) | 0.642 | 21 | 6.0 (2.5) | 0.896 |
| Housing | Best Party to Handle the Problem (Gallup) | 10 | 34.2 (6.5) | 0.967 | 10 | 38.0 (4.2) | 0.951 | 10 | 4.7 (3.0) | 0.984 |
| Public Transport | Party with Best Policies on the Problem (Ipsos-MORI) | 19 | 12.5 (4.3) | 0.812 | 19 | 33.1 (7.6) | 0.901 | 19 | 7.7 (2.7) | 0.707 |
| Devolution | Party with Best Policies on the Problem (Ipsos-MORI) | 10 | 18.8 (5.0) | 0.342 | 10 | 22.5 (5.7) | 0.912 | 10 | 7.8 (1.5) | 0.703 |
| Northern Ireland | Party with Best Policies on the Problem (Ipsos-MORI) | 10 | 17.4 (9.1) | 0.051 | 10 | 29.5 (15.4) | 0.385 | 10 | 2.8 (1.0) | 0.559 |
| Animal Welfare | Party with Best Policies on the Problem (Ipsos-MORI) | 10 | 6.3 (2.1) | - | 10 | 17.5 (4.2) | 0.493 | 10 | 8.9 (1.8) | 0.625 |
| OVERALL MOOD (WEIGHTED AVERAGE METRIC) | | 64 | 31.85 (4.61) | - | | 33.03 (4.21) | - | | 8.85 (2.31) | |

Loadings reported where $n \geq 10$

N is number of time points (yrs), not number of poll questions

Table 1. A model of party support

| | Labour | ΔVote_t Conservative | Liberal |
|--|----------------------|---------------------------------------|----------------------|
| Constant | -2.431 (7.186) | 3.629 (7.087) | 13.294 (8.764) |
| Long-run effects: Vote_{t-1} (ECM) | -0.456*** (0.120) | -0.269* (0.107) | -0.686*** (0.160) |
| Short-run effects: $\Delta\text{Preferences}_t$ | -0.163 (0.232) | -0.156 (0.174) | 0.029 (0.250) |
| Long-run effects: Preferences_{t-1} | 0.182 (0.148) | -0.179† (0.107) | -0.287† (0.151) |
| Short-run effects: $\Delta\text{Competence}_t$ | 0.534*** (0.157) | 0.614*** (0.111) | 1.567*** (0.326) |
| Long-run effects: Competence_{t-1} | 0.116 (0.225) | 0.386* (0.146) | 1.433** (0.443) |
| Short-run effects: $\Delta\text{Leader Ratings}_t$ | 0.354*** (0.061) | 0.310*** (0.057) | 0.064 (0.076) |
| Long-run effects: $\text{Leader Ratings}_{t-1}$ | 0.206** (0.072) | 0.093 (0.056) | 0.018 (0.063) |
| Short-run effects: ΔMisery_t | -0.059 (0.152) | -0.235† (0.120) | 0.047 (0.184) |
| Long-run effects: Misery_{t-1} | 0.043 (0.120) | -0.125 (0.080) | -0.022 (0.117) |
| Long-run effects: Gov/Opp _{t-1} (Con=+1, Lab=-1) | -0.045 (0.092) | 0.181 (0.117) | - |
| Start | 1950 | 1951 | 1957 |
| End | 2005 | 2005 | 2005 |
| N | 55 | 54 | 48 |
| Adjusted R ² | 0.679 | 0.679 | 0.450 |
| Durbin-Watson d-statistic | 1.754 | 1.497 | 1.813 |
| Breusch-Godfrey (1) | 0.526 | 6.892** | 2.367 |
| Ljung-Box Q statistic | 16.100 | 15.946 | 21.127 |
| ARCH χ^2 (1) | 0.184 | 0.511 | 0.149 |

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$ † $\leq .1$

For the Conservative model, the long-run multiplier⁸ is equal to -0.672 (0.450) for Preferences, 1.417* (0.577) for Competence, 0.350† (0.204) for Leader Ratings, and -0.466 (0.321) for the misery index. For the Labour model, the long-run multiplier is equal to 0.405 (0.342) for Preferences, 0.254 (0.484) for Competence, 0.454*** (0.130) for Leader Ratings and 0.099 (0.270) for the misery index. For the Liberal model, the long-run multiplier is equal to -0.415† (0.211) for Preferences, 2.095*** (0.384) for Competence, 0.029 (0.092) for Leader Ratings and -0.031 (0.170) for the misery index.

⁸ The long-run multiplier (k_1) is the total short-run and long-run effect on party support of a one-point increase in the independent variable. The long-run multiplier (k_1) can be represented in the form:

$$k_1 = \frac{\beta_3}{\beta_2}, \text{ where } \beta_2 \text{ is the error-correction mechanism and } \beta_3 \text{ is the long-run effect of the}$$

independent variable. The standard errors are calculated using the Bewley transformation (see Bannerjee et al. 1993).

Appendix

Table A1. Questions

| Questions | Obs. | % |
|--|-------------|-------|
| Economy, inflation, prices, interest rates, exchange rates, pound, trade | 429 | 18.12 |
| Taxation | 116 | 4.90 |
| Unemployment | 180 | 7.60 |
| Health, NHS | 173 | 7.31 |
| Immigration, race relations asylum | 69 | 2.91 |
| Labour relations, strikes, trade unions, employment | 184 | 7.77 |
| Education, schools | 167 | 7.05 |
| Environment, climate change | 75 | 3.17 |
| Transport, public transport | 61 | 2.58 |
| Law and order, crime, hanging | 180 | 7.60 |
| Welfare, benefits, pensions, poverty, homelessness | 132 | 5.57 |
| Housing | 62 | 2.62 |
| Defence, international/foreign affairs, nuclear arms/weapons and disarmament, Iraq | 210 | 8.87 |
| Northern Ireland, Constitution, Devolution | 31 | 1.31 |
| Europe, EU, Common Market | 123 | 5.19 |
| Terrorism | 10 | 0.42 |
| Other: Animal welfare, ethics, morality, individual freedom, fair society, freedom of speech, privacy, partys' effectiveness in 'representing its ideas', modernisation, national unity, women, young people, democracy, public ownership. | 166 | 7.01 |
| Total | 2368 | |

Sample questions:

Q. If Britain were in economic difficulties, which party do you think could handle the problem best - the Conservatives or Labour?

Q. Which party do you think can best handle the problem, or isn't there much to choose between them, on the issue of full employment, short-time working?

Q. I am going to read out a list of problems facing the country. Could you tell me for each of them which political party you personally think would handle the problem best? (Pensions)

Q. Irrespective of your own preferences, which party do you think would be most likely to look after Britain's pensioners?

Q. Which parties do you think are particularly good at improving race relations? Any others?

Q. Which party do you think has the best policies to deal with law and order?

Q. How well would/has the Conservative government handled unemployment? (Very well + Fairly well)

Table A2. Number of competence poll questions per year

| Year | Gallup | MORI | Populus | YouGov | BES | Total |
|-------------|--------|------|---------|--------|-----|-------|
| 1945 | 1 | | | | | 1 |
| 1951 | 2 | | | | | 2 |
| 1952 | 1 | | | | | 1 |
| 1953 | 3 | | | | | 3 |
| 1954 | 3 | | | | | 3 |
| 1956 | 5 | | | | | 5 |
| 1957 | 8 | | | | | 8 |
| 1958 | 1 | | | | | 1 |
| 1959 | 22 | | | | | 22 |
| 1961 | 1 | | | | | 1 |
| 1962 | 6 | | | | | 6 |
| 1963 | 2 | | | | 1 | 3 |
| 1964 | 35 | | | | | 35 |
| 1965 | 6 | | | | | 6 |
| 1966 | 28 | | | | 1 | 29 |
| 1967 | 7 | | | | | 7 |
| 1968 | 9 | | | | | 9 |
| 1969 | 18 | | | | | 18 |
| 1970 | 18 | | | | 3 | 21 |
| 1971 | 15 | | | | | 15 |
| 1972 | 9 | | | | | 9 |
| 1973 | 10 | | | | | 10 |
| 1974 | 38 | | | | 9 | 47 |
| 1975 | 31 | | | | | 31 |
| 1977 | | 6 | | | | 6 |
| 1978 | 87 | 8 | | | | 95 |
| 1979 | 47 | 28 | | | 10 | 85 |
| 1980 | 28 | 8 | | | | 36 |
| 1981 | 29 | 9 | | | | 38 |
| 1982 | 27 | 8 | | | | 35 |
| 1983 | 25 | 45 | | | 6 | 76 |
| 1984 | 80 | | | | | 80 |
| 1985 | 96 | 7 | | | | 103 |
| 1986 | 32 | 7 | | | | 39 |
| 1987 | 91 | 41 | | | 5 | 137 |
| 1988 | 22 | 5 | | | | 27 |
| 1989 | 22 | | | | | 22 |
| 1990 | 79 | 14 | | | | 93 |
| 1991 | 82 | 38 | | | | 120 |
| 1992 | 133 | 48 | | | | 181 |
| 1993 | 41 | 13 | | | | 54 |
| 1994 | 40 | 16 | | | | 56 |
| 1995 | 43 | 17 | | | | 60 |
| 1996 | 73 | 28 | | | | 101 |
| 1997 | 121 | 30 | | | 6 | 157 |
| 1998 | 27 | 17 | | | 6 | 50 |
| 1999 | 12 | 16 | | | 6 | 34 |
| 2000 | 55 | 32 | | | 6 | 93 |
| 2001 | | 16 | | | 14 | 30 |
| 2002 | | 16 | | | | 16 |
| 2003 | | 16 | | 12 | | 28 |
| 2004 | | 16 | 7 | 13 | | 36 |
| 2005 | | 5 | 31 | 12 | 35 | 83 |
| 2006 | | 16 | 5 | 8 | | 29 |
| 2007 | | 16 | 7 | 8 | | 31 |
| 2008 | | | 14 | 30 | | 44 |
| Grand Total | 1571 | 542 | 64 | 83 | 108 | 2368 |

Table A3. Weak exogeneity test

| | ΔVote Equation (Con) | | | ΔVote Equation (Lab) | | | ΔVote Equation (Lib) | | |
|---|----------------------|---------------------|---------------------|----------------------|---------------------|---------------------|----------------------|---------------------|---------------------|
| | Preferences | Leader Ratings | Misery Index | Preferences | Leader Ratings | Misery Index | Preferences | Leader Ratings | Misery Index |
| Constant | -0.186 (0.424) | -0.286 (0.406) | -0.185 (0.424) | -0.083 (0.571) | 0.003 (0.563) | -0.079 (0.573) | 0.230 (0.476) | 0.195 (0.531) | 0.229 (0.475) |
| Short-run effects: ΔCompetence _t | 0.725*** (0.130) | 0.769*** (0.122) | 0.723*** (0.129) | 0.809*** (0.174) | 0.926*** (0.169) | 0.857*** (0.172) | 1.045*** (0.278) | 1.195*** (0.316) | 1.038*** (0.280) |
| Long-run effects: ECM _{t-1} | | | | | | | | | |
| Residuals: Competence _t = Preferences _t | 0.050 (0.099) | - | - | -0.091 (0.166) | - | - | -0.119 (0.225) | - | - |
| Residuals: Competence _t = Leader _t | - | 0.185 (0.113) | - | - | 0.182 (0.172) | - | - | -0.130 (0.276) | - |
| Residuals: Competence _t = Misery _t | - | - | 0.046 (0.097) | - | - | 0.008 (0.148) | - | - | -0.127 (0.227) |
| Adjusted R ² | 0.375 | 0.420 | 0.374 | 0.346 | 0.351 | 0.342 | 0.238 | 0.270 | 0.238 |
| N | 55 | 54 | 55 | 55 | 56 | 55 | 55 | 48 | 55 |

* p ≤ .05, ** p ≤ .01, *** p ≤ .001 (two-tailed tests) Start=1950, End=2005