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Political economy models and UK election forecasting: End game?

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ABSTRACT

Political economy models have been applied to election forecasting for some time. However, in the United Kingdom, as well as elsewhere, other methodologies have come to the fore to take their place alongside the forecasting methodology of vote intention polling. Returning to a classic Political Economy model first successfully tested on the 2001 General Election, we ask whether it still has relevance today. After various time series analyses of UK general elections (1955 to the present), we find that it does. The model manages to forecast the vote share of the incumbent party rather accurately, via three predictor variables: economic performance, executive/prime ministerial approval, and the number of terms in office. For the 2024 contest, it forecasted, before-the-fact, a Conservative defeat of historic proportions.

Scientific election forecasting has been carried out in the UK for some time, if we consider its origins in public opinion polling. However, a later tradition has become well-established, utilizing structural models, based on voting theory and ex ante predictive power (see the literature review by Stegmaier et al., 2023). Earlier modeling work aimed at explaining government popularity, such as Goodhart and Bhansali's (1970) founding study of the impacts of unemployment and inflation (see also Whiteley, 1979). Later efforts also examined determinants of government vote share. In other words, examination of a 'vote function,' rather than a 'popularity function' (Paldam, 1981). The first vote function analysis was carried out by Mughan (1987), who studied three simple vote share forecasting equations: 1) the 'incremental model,' driven by the previous incumbent vote share, 2) the 'polling model,' driven by the final Gallup poll, and 3) the 'economic model,' driven by macroeconomic measures – unemployment and GDP. He concluded that it 'is inescapable that the economic model is the more impressive and valuable forecasting instrument' (Mughan, 1987, 203) for forecasting government vote share, on the combined grounds of accuracy and lead time. It yielded the best statistical fit of all three models over multiple election cycles, and was just as accurate in predicting the 1987 election as the polling model but could do so with a far greater lead time.

In subsequent UK election forecasting, the impact of economic variables continued to be pursued, with inflation and interest added to the mix by Sanders (1991), who provided the first before-the-fact model for a general election forecast (via the 1992 contest). Soon a 'misery index', which combined inflation and unemployment, was brought on board, as modelers began to explore further economic alternatives (Clarke and Stewart, 1995). While only Sanders (1995) ventured an ex ante model forecast for the 1997 election, there was nevertheless a flurry of modeling activity, as forecasters experimented, in particular, with the role of the economy. For the 2001 election, Lewis-Beck et al. (2004) joined together leading macro-measures of economic and political performance to formulate a parsimonious political economy (PE) model of incumbent vote share in UK elections. Conceptually, the model read as follows:

$$\text{Vote share} = f\,(\text{Economic Performance}, \text{Political Performance}, \text{Terms in Office}) \qquad \text{Eq.1}$$

Put into words, the incumbent's vote share in the upcoming election

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depends on the prior workings of the economy, the government's ability to lead, and the government's number of terms in office. Theoretically, this draws on theories of government reward-punishment mechanisms; governments should be electorally rewarded(/punished) when the economy is strong(/weak) and when they are perceived as performing their duties well(/poorly) (Lewis-Beck, 1988: 34; Whiteley, 2008). This may be due to the electorate wishing to reward/punish the government, but alternatively from voters using the information at hand to make a judgment as to who will deliver the best conditions for themselves and their country going into the future (Stewart and Clarke 2018: 192). Yet governments may also be expected to lose electoral support overtime given the known costs to governing (Green and Jennings, 2012a; Bartle et al., 2023). Indeed, in the UK, it is notable that not once has a party lost a general election when it has held a lead on both leadership and economic competence (Fisher, 2018: 499). Below, we use this political economy model as a framework, in order to explore its evolving utility as a central tool for UK election forecasters. Also, it stands as a benchmark, for comparison to other approaches.

While there are many election outcomes that one can forecast, here we focus on the vote share of the incumbent government for theoretical reasons. As Mughan (1987) remarked in his foundational piece, political economy models are substantially more accurate in predicting the outcome for the governing party than for predicting that of the opposition, which is consummate with Butler and Stokes (1969: 392) in their seminal work where they note that 'in the simplest of [economic voting] models the electorate pays attention only to the party in power and only to conditions during its current tenure in office'. Given the reward-punishment theory that underpins these models, further empirical credence is provided from work carried out since on the British case, showing that both economic evaluations (Butt, 2006; Berz, 2020) and policy competence evaluations (Green and Jennings, 2012b) affect incumbent but not opposition support.[1] The increasing electoral volatility also means that the opposition has become much more splintered over the past decade (Fieldhouse et al., 2023) which increases the difficulty for forecasters. And yet, if the reward-punishment theory that underpins these structural models has stayed the course, then these models should still retain predictive power for the incumbent. The economic voting literature has shown that even countries with norms of multiparty competition and coalition governments can see economic reward-punishment mechanisms work for the main incumbent party (Debus et al., 2014). This supports the notion that political economy forecasting models may still be helpful even under ever evolving party system change.

We begin with a replication of earlier models carried out by Lewis-Beck et al. (2004). Then, we go on to add, sequentially, subsequent elections up to the present day. Along the way, we assess its qualities and eventually issue an ex ante forecast for the 2024 contest. As shall be seen, the model holds up rather well.

1. The basic political economy model: initial in-sample estimates, 1955–2019

Drawing on the pioneering work just described, the basic model posits government vote share as determined by three operational indicators: the first two are the inflation rate (E) and public approval of the government record (A), both measured six months prior to the general election. The inflation rate uses the Retail Price Index (RPI) provided by the Office for National Statistics (2024a). Government approval draws upon the percentage of respondents who answered 'approve' as a percentage of all respondents in Gallup polls for the 1955 election up until the end of 2000[2] (King and Wybrow, 2001), and thereafter -when Gallup stopped carrying out regular political omnibus polls in Britain - from Ipsos polls[3] (Mortimore, 2024). The third indicator included is the number of terms the government has been in office for (T). This specification yields the ordinary least squares estimates (OLS) reported in Table 1. By initially examining in-sample forecasts, we can make a preliminary assessment as to which variables seem to matter and how well the model fit performs. While recognizing that high in-sample explanatory power does not guarantee an accurate out-of-sample forecast, those with low explanatory power would suggest a lack of model reliability. Moreover, models with the best in-sample fit are typically those with the lowest out-of-sample error (Lewis-Beck, 2005).

The first model in the table replicates the original analysis (Lewis-Beck et al., 2004) for the elections from 1955 to 1997, using the exact same variable specification. All three variables are significant and the Adjusted R^2 is 0.82. The model works well with the addition of the subsequent election, through 2005 (see model 2). That is, Inflation and Approval remain significant at 0.05, two-tail; Terms in Office is significant at 0.05, one-tail. The fit statistics hold, i.e. Adjusted $R^2 = 0.74$.

However, adding in 2010 and up to 2017, the model lessens it grip somewhat (see model 3). While the inflation and government approval variables are still significant, the fit statistics lower a bit, Adjusted R^2 now being 0.66. Going on to include the 2019 contest causes clear decay (see model 4). Approval remains significant, at 0.05, two-tail: but inflation fails significance at that level, as does Terms of Office. Furthermore, the adjusted R^2 drops to 0.43.

What about considering a fix or two for improving model 4? Suppose the lag structure receives slight alternation, switching to Government Approval at 3 months. Or we switch the economic indicator to that of unemployment.[4] These changes actually make things worse.[5] What to do? If we just exclude 2019, Government Approval works better (at both 3- and 6-month lags). Nevertheless, the 2019 election poses a conundrum. Though the government was extremely unpopular, Johnson's unpopularity paled next to that of Labour's leader Jeremy Corbyn, and the issue of Brexit dominated the campaign (see Fieldhouse et al., 2023; Ford et al., 2021; Prosser, 2021). These particular circumstances may make it a special case for the political economy model. But an exclusion tactic for that election sacrifices information and violates the specification principle, i.e. relevant independent variables should be included and irrelevant ones excluded (Lewis-Beck and Lewis-Beck, 2015, p.72). One possibility involves the inclusion of a dummy variable for this election; this we do in model 5 (2019 Election = 1, otherwise 0). We observe that the situation, with respect to statistical fit, appears to improve, e.g., the Adjusted R^2 jumps up 20 points and both the AIC and BIC reduce considerably.

[1] Though see Nadeau et al. (2009) who forecast opposition vote share using approval of the leader of the opposition.

[2] Question wording: "Do you approve or disapprove of the government's record to date? Approve; disapprove; don't know".

[3] Question wording: "Are you satisfied or dissatisfied with the way the Government is running the country? Satisfied; dissatisfied; don't know". For the 2019 General Election, approval ratings were taken from July rather June 2019 to reflect the change of the incumbent Prime Minister from Theresa May to Boris Johnson. For the 1955 General Election, approval ratings were taken from January 1955 rather than November 1954 due to the availability of polling data on the time series which is sparser during this period.

[4] The unemployment rate for those aged 16 and over (seasonally adjusted) from Office for National Statistics (2024b) was used for all elections from 1974 onwards. For elections prior to this, due to data availability, non-seasonally adjusted figures were drawn upon (Denman and Macdonald, 1996).

[5] Not shown in table. When using government approval with inflation at 3-month lags, the adjusted R^2 is 0.32. Meanwhile, using government approval and unemployment with 6-months lags results in an adjusted R^2 of 0.32, while with 3-month lags of each of these the adjusted R^2 is 0.37.

Table 1
Incumbent Vote Share as Function of Political Economy Model I (OLS estimates).

	Model 1	Model 2	Model 3	Model 4	Model 5
	1955–97	1955–2005	1955–2017	1955–2019	1955–2019
Inflation t-6	−0.94**	−0.77**	−0.63*	−0.62^{+}	−0.63*
	(0.21)	(0.22)	(0.26)	(0.33)	(0.26)
Gov Approval t-6	0.26*	0.36**	0.44**	0.33*	0.44**
	(0.08)	(0.09)	(0.10)	(0.12)	(0.10)
Terms in Office	−2.94*	−1.87^{+}	1.39	−1.9	−1.39
	(0.98)	(1.00)	(1.10)	(1.40)	(1.10)
2019 Dummy	…	…	…	…	11.94**
					(3.87)
Constant	42.45***	35.22***	29.67***	33.74***	29.67***
	(5.13)	(4.91)	(5.36)	(6.58)	(5.36)
Forecast 2024					26.8 %
Standard error of the forecast					4.29
Adj R^2	0.82	0.74	0.66	0.43	0.64
AIC				107.05	99.16
BIC				110.62	103.61
RMSE	2.32	2.76	3.39	4.30	3.39
N	12	14	17	18	18

Note: significance values: ***p < 0.001; **p < 0.01; *p < 0.05; $^{+}$p<0.10; SE in parentheses.

Table 2
Incumbent Vote Share as Function of Political Economy Model II (OLS estimates).

	Model 6	Model 7	Model 8
	1955–2019	1955–2019	1955–2019
Inflation t-6	−0.62*		
	(0.27)		
Misery t-6		−0.39^{+}	
		(0.21)	
Inflation/Interest t-6			−0.39
			(0.28)
PM net Approval t-6	0.19**	0.16**	0.19**
	(0.05)	(0.05)	(0.05)
Terms in Office	−1.89^{+}	−1.49	−1.49
	(1.04)	1.04	(1.11)
Constant	47.18**	47.38***	45.77***
	(2.82)	(3.30)	(3.10)
Forecast 2024	27.7 %	30.5 %	28.9 %
Standard error of the forecast	4.46	4.60	4.83
Adj R^2	0.61	0.57	0.53
AIC	100.26	102.03	103.55
BIC	103.82	105.59	107.11
RMSE	3.56	3.74	3.90
N	18	18	18

Note: significance values: ***p < 0.001; **p < 0.01; *p < 0.05; +p < 0.10; SE in parentheses.

2. The basic political economy model: further in-sample estimates

In some ways, 2019 holds the keys to unlocking our prediction dilemma. It encourages us to think harder about the theoretical specification and empirical measurement in our model (Lewis-Beck and Tien, 2008). Via Table 2, we pursue one example, which focuses on the approval variable and measurement. Suppose it turns away from the institutional approval of the government itself, and toward the approval of the individual leader, here the personality of the Prime Minister, in the context of ongoing 'presidentialisation' of the office (Costa Lobo and Curtice, 2015; Stevens and Karp, 2012) and the electoral benefit having a popular leader can bring parties (Quinlan, 2024). This decision moreover reflects empirical developments. Lebo and Norpoth (2011, 2013) found that approval of the Prime Minister is a more accurate predictor of the vote than that of government approval (see also Lebo and Norpoth, 2007, 2016 for other implementations of the variable in election forecasts). Even more recently, Lebo et al. (2023) established that there is a long-term equilibrium from 1979 to 2022 between Prime Ministerial approval and an intention to vote for the party in government, which also points to the importance of Prime Ministerial approval in that it can stand the test of time.

Therefore, considering the 2019 Prime Minister case in particular, "approval" on its own represents only part of the story, because "disapproval" is also clearly relevant. In other words, "net approval" needs to be examined – this may be particularly important for decoding the 2019 case, as we use prime ministerial approval from Johnson's first poll upon becoming Prime Minister, in which over 30 % of those polled responded "don't know". Utilizing the net approval of the Prime Minister across the time series (see Blumenau, 2015 who also followed this approach) does make a statistical difference. As can be seen in Tables 2 if we use *net* approval and inflation at 6-month lags, the adjusted R^2 is clearly stronger than when we use government approval, e.g., the Adjusted R^2 climbs from 0.43 (model 4) to 0.61 (model 6). While the addition of net Prime Ministerial approval improves the model fit considerably, can modifying the economic variables make a further difference? In model 5, we substitute inflation for the "misery index," which combines it with unemployment rates (see Clarke and Stewart, 1995), and in model 6 we follow the approach of Nadeau et al. (2009) in combining inflation with interest rates (taken from Bank of England, 2024). And yet, the models appear to work best when interest rates are used on their own, rather than when combined with these other indicators.

3. Out of sample predictions, 1955–2019

Thus far, we have been examining the performance of in-sample predictions. However, how well do these models work out-of-sample? After all, the aim of such structural models is to be able to predict data it has not yet seen.

For this purpose, we commence with a jackknifing exercise in which we carry out the regression analyses concentrating on the two models that performed best in Tables 1 and 2 (models 5 and 6). Yet this time, for each regression output, we omit the results of one election each time and predict what the model would forecast for the omitted election result. In Tables 3 and 4 below, we offer two general accuracy measures, the Mean Absolute Error (MAE), and the Root Mean Squared Error (RMSE) (for a discussion of the difference between these two errors, see Jennings et al., 2020).

Both the MAE and the RMSE are somewhat higher in the first column of Table 3 in which we use the Lewis-Beck et al. (2004) original specification with the addition of a 2019 dummy variable in comparison to those in the second columns when government approval shifts to net

Table 3
Predictions and errors from jackknife tests, 1955–2019 (OLS estimates).

Election	Actual	(1)		(2)	
		Predicted	Error	Predicted	Error
1955	49.7	50	0.3	47.1	−2.6
1959	49.4	46.7	−2.7	49.4	0
1964	43.4	45.4	−2	39.7	−3.7
1966	48	46.8	−1.2	45.6	−2.4
1970	43.1	37.2	−5.9	43.2	0.1
1974 Feb	37.9	34.5	−3.4	34.2	−3.7
1974 Oct	39.3	41.7	2.4	41.2	1.9
1979	36.9	42.4	5.5	43	6.1
1983	42.4	41.2	−1.2	39.8	−2.6
1987	42.3	39.2	−3.1	36.5	−5.8
1992	41.9	37.1	−4.8	41.2	−0.7
1997	30.7	30.1	−0.6	32.5	1.8
2001	40.7	41.8	1.1	44.3	3.6
2005	35.2	37.5	2.3	36.1	0.9
2010	29	36	7	36.1	7.1
2015	36.9	43.3	6.4	42.7	5.8
2017	42.3	41.2	−1.1	45	2.7
2019	43.6	31.7	−11.9	37.6	−6
MAE		**3.5**		**3.2**	
RMSE		**4.5**		**3.8**	

Notes: Column 1 regresses vote share on government approval, inflation, incumbent terms in office and a 2019 dummy; Column 2 regresses vote share on net prime ministerial approval, inflation and incumbent terms in office.

Table 4
Predictions and errors from "step ahead" tests, 1955–2019 (OLS estimates).

Election	Actual	(1)		(2)	
		Predicted	Error	Predicted	Error
1974 Feb	37.9	42.1	4.2	44.1	6.2
1974 Oct	39.3	32.3	−7	35.4	−3.9
1979	36.9	41.4	4.5	42.1	5.2
1983	42.4	44.6	2.2	43.7	1.3
1987	42.3	41.6	−0.7	40	−2.3
1992	41.9	39.2	−2.7	41.2	−0.7
1997	30.7	35.9	5.2	35.4	4.7
2001	40.7	45.7	5	47.3	6.6
2005	35.2	39.6	4.4	38.4	3.2
2010	29	36.2	7.2	35.8	6.8
2015	36.9	43.3	6.4	43	6.1
2017	42.3	41.2	−1.1	44.6	2.3
2019	43.6	31.7	−11.9	37.6	−6
MAE		**4.8**		**4.3**	
RMSE		**5.6**		**4.7**	

Notes: Column 1 regresses vote share on government approval, inflation and incumbent terms (No, 2019 dummy is inserted as this is the last election to be forecasted); Column 2 regresses vote share on net prime ministerial approval, inflation and incumbent terms in office.

prime ministerial approval. As the Lewis-Beck et al. models based on 1955–1997 data recorded an MAE of 2.3, one can deduce that the error of these structural models has increased over time, but an MAE of 3.2 and RMSE of 3.8 in is still respectable 6 months out from an election.[6]

It is also revealing in Table 3 to focus on some specific elections. 1992 saw the polls predict a tight race or a Labour victory, when the Conservatives in the election led Labour by 7.6 % causing an inquiry into what went wrong on 'the worst disaster in [opinion polling's] fifty year history' (Crewe, 1997: 569). In contrast to the original specification of the model and the failure of the polls that year to accurately predict the incumbent government's vote share, the revised model with net prime ministerial approval correctly predicts the Conservative Party's vote share for that year with just an error of 0.7. While we have already established that the political economy model was ill-suited to predicting the 2019 election, our revised version cuts the error in half in comparison to the version utilizing government approval. Furthermore, though the errors in 2010 and 2015 are both rather large,[7] it performed well for the penultimate election in the series in 2017.

An even tougher test is to perform "step ahead" forecasts where the model predicts each election using the information available at t-1 (see Table 4). Given the number of covariates that we are using, we start this process with predicting the February 1974 election, and continue all the way up to 2019. As one would expect, under this scenario the average errors are greater, rising by approximately 1 percentage point in comparison to those calculated from the jackknife tests in Table 3.

4. Forecasting the 2024 general elections: A range of choices

The notion of a political economy model brings to the fore the need to examine deep and enduring factors driving the UK electoral system. Our originating equation, first applied to the 2001 contest, has been studied from different angles in order to update and test it. After the analyses of Tables 1–4, it would appear to still hold promise as a forecasting instrument, at least with regard to accuracy, a sine qua non. However, besides accuracy, the model keeps other valued tenants (Lewis-Beck, 2005), namely parsimony (only 3 independent variables), transparency (simple measures readily available), and lead time (6 months). The last property, lead time, should not be neglected, as a forecast, to be beyond reproach, must be released publicly prior to the election itself. (We released a version this political economy model the night before the 2024 election (Kenny and Lewis-Beck, 2024)).

In Tables 1 and 2, we can examine the performance characteristics of slightly different specifications of the PE model, formulated prior to that contest. Look at the prediction offered based on models 5 and 6 and compare the point estimates forecasting the incumbent party national vote share— the Conservatives in 2024. For model 5, 26.8 percent. For model 6, 27.7 percent. Given the actual result was 23.7 percent, we see the closest estimate comes from the last equation in Table 1, with an absolute error of only 3.1 (i.e., |26.8–23.7|).[8] This model bases itself on the full sample of elections, estimated on the original model specification, plus the addition of a dummy variable for the 2019 election. However, this absolute prediction error is based only on one election. Let us construct a prediction interval around it. A 95 percent prediction interval utilizing the standard error of the forecast [26.8±2 (standard error of the forecast)] = [26.8 +/−(8.6)] = [18.2, 35.4] does capture the observed value. If we use either the narrower values of the RMSE or MAE from Table 3 to construct this instead of the standard error of the forecast, the observed value is likewise within these bounds. This suggests the underlying strength of the political economy specification. Model 6 in Table 2 delivers much the same performance, in terms of goodness-of-fit and forecasting accuracy.

The slope coefficients of the economic variables highlight, in particular, the continued importance of the economy for the forecasting of UK elections. For example, in Table 1 (Model 1), the inflation coefficient indicates unit elasticity over the period 1955–1997. If the rate rises by one percentage point, the expected drop in government support

[6] While the insertion of a 2019 dummy variable into the models for Table 3, Column 1 reduces both the MAE and the RMSE compared to when the dummy is omitted, the insertion of a dummy into the equation for the models underpinning Table 3, Column 2 does not alter the errors. This suggests that the new specification is more robust to the 2019 election and does not require the exception.

[7] Keeping in mind that 2015 witnessed both a large polling error and a failure of any ex ante forecast models to predict the outcome (Fisher and Lewis-Beck 2016; Stegmaier et al., 2023: Table 1) and the dominance of Brexit in the 2019 campaign as already discussed.

[8] Both of these predictions are also more accurate than the predictions for Models 7 and 8 which, as we have already observed, have a worse in-model fit.

is approximately one percentage point (i.e., −0.94). Though this is somewhat weaker over the full period, its magnitude remains notable at just over 0.60 in models 5 and 6, being statistically significant at the $p < 0.05$ level.

5. Robustness tests and ex post adjustments

In presenting our results, we have reported on the ex ante models that we had carried out prior to the 2024 election – one faithful to the Lewis-Beck et al. (2004) specification, and one in which we replaced government approval for net prime ministerial approval. There are however tests that we can carry out to further test the strength of the findings.

Firstly, the models contain a variable indicating the number of terms an incumbent has been in office, in order to factor in the costs of governing. Given that a number of governments have not run their full term of office before calling elections – most notably the occurrence of two elections in 1974, but also in recent years the three elections that took place between 2015 and 2019 – might the costs of government be better calculated as per the amount of time (in months) that a government has held office as opposed to their number of terms? Based on such a substitute for models 5 and 6, both the Adjusted R^2 rise in the in-sample model by 0.01; the RMSE falls for the government approval model, but increases for the prime ministerial model. Furthermore, the 2024 predictions are worse estimating a Conservative Party vote share of 29.2 % when using the net prime ministerial approval variable, and 27.8 % when using the government approval variable. Thus, despite slight improvements to the model fit, the 2024 prediction would worsen with such an adjustment.

Secondly, given the long time span under investigation, would it benefit the models to include a time variable to account for potential changes in time trends? To this effect, we include a variable in the equation that adds the number of calendar years at each election since the first election in our sample in 1955. This improves the in-sample model fit, increasing the Adjusted R^2 from 0.61 to 0.65 when net prime ministerial approval is included, as well as bringing the predicted 2024 election result closer to the actual result with a forecast of 27.0 %. The increase in accuracy is greater when using the government approval variable with the 2019 dummy, with the Adjusted R^2 rising from 0.64 to 0.73, and the predicted 2025 election result set at 25.4 %, just 1.7 % out from the end result. However, in the step ahead models, the RMSE does not improve for the prime ministerial model, and worsens for the model with government approval. It is also notable that while the errors for the 2001–2015 elections are all lower under this model (both when using government approval and when using net prime ministerial approval), the errors for 2017 and 2019 increase. Future structural forecasts in the country may wish to consider the potential benefits and drawbacks for accuracy of accounting for the passage of time while attempting to keep the models parsimonious.

Thirdly, one may be interested in how much of the accuracy of the models can be achieved by having models with economic but not political variables, and vice versa. In all in-sample and out-of-sample tests, the RMSE is lower when net prime ministerial approval is included and the economic variables[9] are excluded, than vice-versa. This is not entirely surprising given that prime ministerial approval in Britain is in itself partly influenced by publics' perceptions of the economy (Berz, 2020). That is not to say, however, that the economy does not add to the model – the inclusion of inflation over 1955–2019 reduces the RMSE by 0.3 in step-ahead models and by 0.5 in jack-knife models in comparison to models in which just prime ministerial approval and the incumbent party's terms of office variables are present.

Finally, in replicating the Lewis-Beck et al. (2004) models, the first election that we include in our training dataset is 1955. Would the model improve further by also including data from the 1950 and 1951 elections? When we carry this out, the model fit and prediction accuracy actually worsens for government approval-based Model 5 in Table 1. For the models in Table 2, the models' Root Mean Square Errors and the prediction errors for the 2024 forecasts improve by approximately 0.1. But for these three models (6–8), the change in accuracy of the 2024 point estimate is between −0.1 and +0.3, and so the substantial impact on the accuracy of the forecasts of including or excluding the 1950 and 1951 elections in the training dataset is negligible.

6. Conclusions

Clearly, political economy models appear far from dead, as applied to the British case. This conclusion finds reinforcement in a recent investigation of the impact of economics on executive approval in Britain (1980) to 2015. Bartle et al. (2023) explore multiple economic indicators, deciding that the economic expectations that the electorate has of their government, especially, are crucial determinants on Prime Minister support. Hellwig and Singer (2023, figure 15.2), in a comparative analysis of twenty industrial democracies (1990–2019), find the impact of consumer confidence indices on executive approval in Great Britain remains robust, ranking about in the middle on the pack (i.e., No.11). Overall, then, the economy, measured objectively or subjectively, remains a valuable component in virtually any structural model that aims to forecast government support.

With respect to political economy models in particular, the forecasting game continues as has recently also been demonstrated in other country contexts (Lewis-Beck et al., 2025). In general, the economy holds a place of central importance if the structural modeler wishes to predict UK election outcomes. Its pivotal role helps justify the wish of Budge (2019), that the "search for truly law-like relations be renewed." It is important to remember that, in contrast to forecasts taken the day before an election, those taken far in advance should be expected to be indicative but not spot on (Fisher, 2018, 505).[10] Even so, in two out of the last three elections – that is 2017 and 2024 – it has proved its merit after some difficulties in previous elections. As an election forecasting tool, political economy models can still rival the more popular tool of vote intentions in public opinion polls. For example, the day-before-election-day *Guardian* vote intention poll aggregator for the Conservatives in 2024 was 20.8 percentage points (Leach et al., 2024), yielding a forecasting error of – 2.9 points. In contrast, our considered estimate above of about 26.8 (model 5) has an error of only +3 percentage points. That is to say, this political economy model has a similar prediction error to the polls, but comes available at a not-trivial lead time, i.e. about six months before the election, rather than days. Such conclusions are remarkably similar to those made by Mughan (1987) in his forecasts for the 1987 election in comparing his economic model to his polling model. While its error is larger than it was at the time of Lewis-Beck et al.'s (2004) study - coinciding with a broader international pattern in which 'the magnitude of the economy's effect [on executive approval] has diminished since the turn of the 21st century' (Hellwig and Singer, 2023: 352) – it still holds relevance. Vote intention polls have also seen an increased incidence of polling errors over recent decades (see Marriott, 2024), which points to a broader challenge for current forecasters. Yet, in the context of the argument and evidence presented herein, the case for further exploration of economics and its election forecasting potential in the UK seems sound.

CRediT authorship contribution statement

John Kenny: Writing – review & editing, Writing – original draft,

[9] This is robust to running models separately including the various economic indicators introduced in this paper.

[10] See Jennings et al. (2020) for further discussion and analyses on the trade-offs between lead time and accuracy in election forecasting.

Methodology, Formal analysis, Data curation, Conceptualization. **Michael S. Lewis-Beck:** Writing – review & editing, Writing – original draft, Methodology, Conceptualization.

Declaration of competing interest

The authors declare no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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Data availability

Data will be made available on request.

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