



Roger I. Snowdon

# Governments, Elections and the Economy

A Study of Endogenous Government  
Macroeconomic Policy, Voters' Economic  
Preferences and Political Business  
Cycles: the UK Experience

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## ABBREVIATIONS

y	=	real output
GDP	=	Gross Domestic Product
GNP	=	Gross National Product
U	=	unemployment rate
I	=	inflation rate
DY	=	annual output growth
DU	=	annual change in unemployment rate
UN	=	natural rate of unemployment
S	=	short-run political Phillips curve
L	=	long-run political Phillips curve
LEAD	=	government popularity lead
GOV	=	partisan political dummy variable
PBC	=	opportunistic political dummy variable
EL	=	electoral cycle political dummy variable
BS	=	backswing political dummy variable
E	=	'election year'
E+1	=	year following an election

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# Chapter 1

## INTRODUCTION

### 1.0 RATIONALE AND BACKGROUND

"When you are together with politicians they always ask you what the economy is going to be like at the next election."

A. Lindbeck, lecture Yale 1977<sup>1</sup>

"All political history shows that, the standing of the Government and its ability to hold the confidence of the electorate at a General Election depend on the success of its economic policy."

Harold Wilson<sup>2</sup>

The adoption of this political economy subject was prompted by quotes such as the above and a long-term interest in economics and political science, and in the inevitable interaction between the two. Given the assumption of humans as rational, self-interested agents, it follows for economists that the prime objective of all politicians must be to achieve and retain political power through vote maximisation at elections, either for power's own sake or as the means to implementing wider objectives, such as shaping society according to particular values. The focus of politicians' concerns, as revealed in the above quotations, is indicative of their assumptions and perceptions concerning the electorate's preferences.

Governments for much of the post-war period have had, or at least believed they had, considerable control over the macro-economy through the manipulation, in Keynesian fashion, of fiscal and monetary policy levers. Rational political agents will use all the resources at their disposal to maximise their political 'profits' at election time by aiming to satisfy voters' demands, and so the performance of the macro-economy becomes susceptible to endogenous government influence. It seems commonsense to suppose that from the first day of a new political administration the government will adopt an economic strategy aimed at securing re-election next time around. Thus emerges the concept of a political business cycle, whereby the direction and timing of macroeconomic indicators reflect political priorities.

The existence or not of such political business cycles has been the subject of considerable debate among economists in the public choice field since the early 1970's. A number of competing models of an interactive political-economic system with endogenous government have been developed, and

extensive empirical testing of these models has taken place. Numerous different researchers have applied different, sophisticated econometric techniques to essentially the same data, producing an array of contradictory results, "moving the debate to a more esoteric and abstract plane" (Alt, 1980). Such differing results may be to a certain extent a function of the specific econometric specification used, although the lack of any convergence in the tests may indicate that no consistent pattern exists within the data. This is a greater possibility with multi-country studies, since both political structures and behaviour and the economic environment may vary considerably among countries.

The outcome is that there is no clear agreement on what is meant by a 'political business cycle' or whether there is convincing evidence of its existence. Following a survey of alternative theories to date, this work presents a model of political-economic behaviour relevant to a two-party system such as the UK, and tests UK data for different modes of endogenous government behaviour, hopefully providing a useful perspective on the debate.

The UK has not been examined as frequently or in as much detail as the US, numerous studies of which have benefited from fixed term elections and a strong two-party system. Although fixed term elections are not a feature of the UK political system, electoral periods tend to last four to five years, and as Alt (1980) comments "it does not seem unreasonable to assume that newly incumbent governments expect a four-year term, with the fifth year seen as a sort of contingent reserve". A regular cycle in UK government popularity over such a term may be expected. Also a strong two-party system has operated for most of the period under consideration. Thus the UK should provide the basis for a productive study.

## **1.1 THEORETICAL ANTECEDENTS OF POLITICAL BUSINESS CYCLE MODELS**

Public choice theories reject the classical doctrine of democracy, that a popularly elected government acting as a 'black box' necessarily pursues the welfare-maximising policy, in favour of a positive approach. This public choice view has evolved from the Schumpeter-Downs paradigm. According to Schumpeter (1954), political parties seek election in competition with each other for the popular vote, and the winning party achieves the political decision-making powers. Downs (1957) formalized this view, casting voters in the role of rational 'consumers' maximising their utility by 'spending' their votes on their most preferred political 'goods' or policy bundle, and casting politicians in the role of rational, competing political 'firms' maximising their votes by supplying the most popular political 'goods' or policy bundle. Parties may develop policy bundles targeted at specific classes of voters, that is political clients, but the incumbent party must be expected to use their control of the economy, a most influential electoral resource, to try to secure their re-election.

## **1.2 ESSENTIAL COMPONENTS OF POLITICAL BUSINESS CYCLE MODELS**

The operation of a political business cycle model implies three discrete but inter-related behaviour patterns by voters, by the incumbent political party and by the macroeconomic system, so that the "business cycle therefore becomes a mixture of economic and political forces interacting with each other" (Lindbeck, 1976). These three behavioural assumptions, on the validity of which the credibility of political business cycle models depends, can be characterised as follows:

- 1 the government's popularity and electoral support is primarily a function of macroeconomic performance, although voter preferences may be partisan or non-partisan;
- 2 government macroeconomic policy preference is a function only of its popularity, either among the electorate as a whole or among the government's partisan client constituency;
- 3 the macro-economy operates so that policy outputs translate predictably, in terms of direction, magnitude and timing, into economic outcomes.

Thus the opportunity is presented to policymakers to construct policy outputs specifically designed to generate the politically optimal mix of economic outcomes. This optimal policy bundle may be non-partisan and aimed at maximising the incumbent's vote among the whole electorate, or partisan and designed to appeal to the party's client constituency, which may or may not be a vote-maximising strategy.

As Haynes and Stone (1990) point out, tests of the first two behavioural assumptions are direct structural tests of components of the model. Tests of the third assumption are usually specified as reduced-form tests of the entire model, linking the party in power or the timing of elections to the performance of the economy. This approach implies all three key behavioural assumptions since if (1) electoral support for the government is a function of economic outcomes, and (2) government policy is a function of its popularity, and (3) economic outcomes are a predictable function of government policy actions, then economic outcomes will be a function of the party in power (in a partisan model) or of the phase of the electoral cycle (in an opportunistic model). Such tests are thus the most comprehensive evidence of the significance of political business cycle models, and accordingly are utilised in the regressions conducted in this work.

### **1.3 CATEGORIES OF POLITICAL BUSINESS CYCLE MODEL**

Models formalising these behavioural principles fall into two main schools, distinguished by the behaviour of politicians. All the models assume that the timing of elections is either exogenously fixed by a political constitution, or endogenously fixed by the incumbent government, but tending to conform to a cycle of regular period.

Opportunistic models assume politicians are entirely adaptive, pragmatic or opportunistic, shaping their policy bundle solely to maximise their overall vote or probability of re-election. Voters are assumed to be non-partisan, and political preferences are distributed uni-modally and symmetrically throughout the voting population, so that, according to Black's (1958) median voter theorem, rational politicians of all parties will promote the same non-partisan policy bundle favoured by the median voter. Such electoral models predict that economic instability will be promoted by incumbent parties in a regular and systematic way, with no partisan difference in policies.

Partisan models assume politicians are ideological or principled, that is different political parties represent the interests of different partisan, client constituencies. When in office political parties shape their policy bundle to appeal primarily to their specific client constituency. Such partisan models predict different, possibly non-optimal, macroeconomic equilibrium outcomes depending on the political orientation of the incumbent party, left-wing parties being more concerned with low unemployment, right-wing parties with achieving low inflation.

The precise nature of the resulting macroeconomic cycles depends on the model of expectations formation assumed by the theorists. The first influential models were those of Nordhaus (1975) on opportunistic cycles and Hibbs (1977) on partisan theory. Both of these, and subsequent developments in the 1970's, shared a pre-rational expectations model of the economy, in which essentially adaptive expectations allowed an exploitable short-run political Phillips curve to exist for a substantial part of the normal electoral period (at least one year), so that significant cycles in real economic variables could be regularly generated by governments. The models usually incorporated a non-vertical long-run Phillips curve which allowed differences in real variables, such as unemployment and output growth, to persist.

The second phase of models developed from the mid-1980's were based on a rational expectations model of the economy. The rational opportunistic model was developed by Rogoff and Sibert (1988) among others, and rational partisan theory by Alesina (1987, 1988). The assumption of rational economic agents makes real economic activity less susceptible to government manipulation, real variables such as unemployment and output growth tending towards their natural levels, as represented by a vertical long-run Phillips curve. Only unexpected monetary or fiscal shocks may produce temporary deviations from the natural trend. Thus regular political cycles are less likely, less predictable and if they do occur are smaller in both size and duration.

## Chapter Footnotes:

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<sup>1</sup> Quoted by Madsen (1980).

<sup>2</sup> Quoted by Mueller (1989).

## **Chapter 2**

# **VOTERS' ECONOMIC PREFERENCES**

### **2.0 INTRODUCTION**

A prerequisite for any model of political-economic interaction is that voters' political preference functions contain significant economic factors, as well as the expected non-economic factors. Government or party popularity functions can thus be estimated, using a variety of largely macroeconomic indicators as explanatory variables, with the addition of dummy variables as appropriate to account for non-economic factors.

Fiorina (1991) has pointed out that voting behaviour in elections in developed liberal democracies is the product of both long-term effects, such as changes in the underlying partisanship of the electorate, and short-term effects, of which the performance of the national economy is a significant factor. Fiorina (1991) and most other writers postulate that low inflation, low unemployment and rising real incomes are political 'goods' in the short-term, enhancing the incumbent government's popularity and chance of re-election, while the opposites are political 'bads' with opposite electoral consequences. Fiorina (1991) has further showed that economic variables are increasingly displacing political variables, such as class, sex, race and religion, as the determinants of the electorate's underlying long-term partisanship; this work also chooses to focus on economic factors as explanatory variables for long-term voting behaviour.

### **2.1 ECONOMIC CONDITIONS AND VOTING OUTCOMES**

Models and empirical research into short-term effects have proceeded on the above assumptions since the early 1970's, concentrating to a large extent on the US political system. Fiorina (1991) comments that, initially political scientists correlated economic time series fluctuations with the congressional vote and presidential approval. Subsequently economists developed more intricate models, which in particular endogenized both economic conditions and government reactions.

#### **2.1.1 US CONGRESSIONAL VOTING - Kramer**

For such time-series analyses, US House congressional elections, occurring every two years, provide the largest dataset. Kramer (1971) established the first significant quantitative relationship between US economic conditions and election outcomes using such data from 1896 to 1964. He



found real income variations to have a substantial impact on the aggregate Republican vote. Previous studies, referred to by Kramer, across a number of countries and years although concentrating on the US, had presented mixed evidence on the qualitative question of whether or not a relationship existed. Kramer also cites investigations into voting behaviour in Britain (Durant, 1965) which reveal "a strong connection between the popularity of the government, as measured by Gallup polls and by-election results, and the state of the economy according to various measures, particularly the unemployment rate".

#### **2.1.1.a The Model of Voter Behaviour**

Kramer's model substitutes a satisficing voter for the rational voter model, to take account of the fact that the relevant information is either unavailable, costly to acquire and analyse, unreliable (eg manifesto promises) or too technical upon which to make judgement. Based on such partial information, the incumbent government receives an individual's vote only if its actual economic performance is at least as good as 'expected', otherwise the vote goes to the opposition.

At aggregate voting level, Kramer specifies a party's share of the US two-party vote as a function of:

- the "underlying basic partisanship of the electorate" reflected in the normal long-run average vote for that party, included as the intercept term [V];
- whether the party is the incumbent<sup>1</sup> government or not, since incumbency confers institutional advantages arising, for example, from patronage, better media access, the resources of the permanent bureaucracy, etc;
- the difference between the actual current economic performance of the incumbent party and 'expected' performance, based on the previous year's actual performance, as indicated by relative income (money and real), relative prices, and unemployment;<sup>2</sup>
- other randomly distributed factors, not considered explicitly in the model, such as candidate personality, campaign performance of parties, domestic or international political shocks, coattail effects.

#### **2.1.1.b Empirical Test of the Model**

Testing the model for the Republican Party, Kramer finds the intercept term [V] explains approximately half of that party's vote-share. A variation of the model to reflect the underlying decline in Republican partisanship results in greater explanatory power from the model. The coefficient of the incumbency variable is found to be small and insignificant,<sup>3</sup> reflecting that,

despite the institutional advantages of incumbency noted above, it also brings offsetting electoral disadvantages, which Kramer characterises as failure to achieve the expected low level of unemployment or inflation and the "high income expectations on the part of the electorate".

The incumbent party's vote share is found to be significantly and positively dependent on relative real income, so that Kramer predicts "a 10% decrease in per capita real personal income would cost the incumbent administration 4 or 5 percent of the congressional vote". However, the inflation and unemployment variables have little independent effect, the price coefficient being significant, with the expected negative sign, only when money income is included instead of real income.<sup>4</sup> The unemployment coefficient is explained by relative political inactivity of the unemployed. Overall, in congressional elections, economic variables account for approximately half of the variance of votes. Of the random disturbances, the Presidential coattails effect<sup>5</sup> is found to be important, accounting for approximately one-sixth of the variance of congressional votes.

Kramer's study is significant as one of the first quantitative analyses of the impact of macroeconomic conditions on voter behaviour. Differentiated voters, from different client constituencies within society, appealed to by partisan parties, are captured in the model by the use of the intercept term [V], although no distinction is made between the macroeconomic policies of the parties, which may be evaluated differently by voters from different client groups.

### **2.1.2 US CONGRESSIONAL VOTING - Other Studies**

Fiorina (1991) reports on a number of studies similar to Kramer's including that by Tufte (1975) who found a similar but smaller real income effect on the congressional mid-term vote. Tufte augmented the basic Kramer model with an additional regressor, Presidential approval at the time of the election, thus treating mid-term congressional elections as essentially referenda on the performance (economic and otherwise) of the incumbent President. He found a regular mid-term downturn in the incumbent party's vote, which may be related to the typical economic deflation during the early part of the incumbent President's four year term, producing cycles in inflation and income growth.<sup>6</sup> Fiorina adds that subsequent studies adopted the Tufte approach with variations in the lags with which regressors affect the election results, and that further congressional mid-term election studies and models in the 1980's continued to demonstrate remarkable predictive success.

### **2.1.3 US PRESIDENTIAL POPULARITY STUDIES**

Fiorina (1991) surveys research into presidential approval using time-series analysis, and this section summarises his comments. He concludes that such research has not conclusively established the existence of well-defined cycles or trends in popularity<sup>7</sup> or consensus on the lagged