

## **The Compleat Economic Voter: New Theory and British Evidence**

MICHAEL S. LEWIS-BECK, RICHARD NADEAU AND  
MARTIAL FOUCAULT\*

Almost all the prolific work done on economic voting has been based on the classic reward–punishment model, which treats the economy as a valence issue. The economy is a valence issue, but it is much more than that. This article explores two other dimensions of economic voting – position and patrimony. Investigating a 2010 British survey containing relevant measures on these three dimensions, the authors estimate their impact on vote intention, using a carefully specified system of equations. According to the evidence reported, each dimension of economic voting has its own independent effect. Moreover, together, they reveal a ‘compleat’ economic voter, who wields considerable power over electoral choice in Britain. This new result confirms and extends recent work on American and French elections.

Economic voting has come of age, some might even say attained ‘old age’, as it faces challenges to its very survival. The extant literature, which now comes to hundreds of studies, consistently exhibits significant effects of economic evaluation on vote choice.<sup>1</sup> Despite this persistent finding, at least three claims have been laid against it: instability, endogeneity and unidimensionality. The first claim argues that the magnitude of the economic voting coefficient varies greatly across time, place and context, implying it has no fundamental existence. The second claim argues that the economic voting coefficient finds its source in partisan bias, having no independent existence of its own. The third claim, a new one, argues that economic voting theory has narrowly restricted its attention to valence issues, thereby excluding the important dimensions of policy position and patrimony.

The first and second claims have received serious treatment elsewhere. We do not weigh in on those arguments, other than to note that these claims have met vigorous counterclaims, which some scholars will (and some will not) find convincing.<sup>2</sup> The third

\* Lewis-Beck – Department of Political Science, University of Iowa (email: michael-lewis-beck@uiowa.edu; Nadeau and Foucault – Department of Political Science, Université de Montréal. This article was first presented at the Annual Conference of the American Political Science Association, Seattle, 2011. An appendix can be found on the *Journal's* website at <http://www.journals.cambridge.org/jips>.

<sup>1</sup> See the literature reviews in the following: Raymond Duch and Randy Stevenson, *The Economic Vote: How Political and Economic Institutions Condition Election Results* (Cambridge: Cambridge University Press, 2008); Michael S. Lewis-Beck and Mary Stegmaier, ‘Economic Determinants of Electoral Outcomes’, *Annual Review of Political Science*, 3 (2000), 183–219; Michael S. Lewis-Beck and Mary Stegmaier, ‘Economic Models of the Vote’, in Russell Dalton and Hans-Dieter Klingemann, eds, *The Oxford Handbook of Political Behavior* (Oxford: Oxford University Press, 2007), pp. 518–37; Michael S. Lewis-Beck and Mary Stegmaier, ‘The Economic Vote in Transitional Democracies’, *Journal of Elections, Public Opinion, and Parties*, 18 (2008), 303–23; Helmut Norpoth, ‘The Economy’ in Laurence LeDuc, Richard G. Niemi and Pippa Norris, eds, *Comparing Democracies: Elections and Voting in Global Perspectives* (Thousand Oaks: Sage, 1996), 299–318; Peter Nannestad and Martin Paldam, ‘The VP Function: A Survey of the Literature on Vote and Popularity Functions after 25 Years’, *Public Choice*, 79 (1994), 213–45.

<sup>2</sup> For debate surrounding the first, see as opposing examples Christopher Anderson, ‘The End of Economic Voting? Contingency Dilemmas and the Limits of Democratic Accountability’, *Annual Review*

claim deals with relatively unexplored terrain. The argument here is that the economic vote should not be just about valence – that is, about whether the economy prospers. In addition, it should include a consideration of the voter's position on economic policy.<sup>3</sup> Besides a policy dimension, the argument extends to inclusion of a patrimonial dimension – that is, the voter's ownership of property.<sup>4</sup>

The notion that the theory of the economic vote, properly defined, composes three dimensions – valence, position and patrimony – receives fullest theoretical development in Lewis-Beck and Nadeau.<sup>5</sup> Empirically, these ideas have been tested, to good effect, on the American and French electorates.<sup>6</sup> To date, then, analysis has been conducted only on presidential (i.e., the United States) or semi-presidential systems (i.e., France).

In the work at hand, we make a critical extension of the model, to a parliamentary system, namely Britain. We view this extension as critical, because parliamentary systems militate against the undergirding psychological mechanism of economic voting, i.e., the attribution of responsibility theory whereby reward or punishment occurs.<sup>7</sup> In particular, in a parliamentary system, as opposed to a presidential one, responsibility for economic policy might be so diffuse that the expected punitive vote cannot be discerned. Our British test is made possible by the availability of a unique 2010 dataset, described below. The advantage of this dataset comes in making possible further tests of economic voting theory. The results also speak to the actual 2010 victory of David Cameron and the Conservatives. However, the data, by the nature of their special battery status, are not intended to serve as the base for a detailed explanation of the 2010 contest. For that purpose, the standard British Election Study data for 2010 are available, and should be consulted.<sup>8</sup> Our aim here is more specific: to offer further cross-national testing of

(*Note continued*)

of *Political Scienc*, 10 (2007), 271–96; Paolo Bellucci and Michael S. Lewis-Beck, 'A Stable Popularity Function? Cross-National Analysis', *European Journal of Political Research*, 50 (2011), 190–211. On the second, see as opposing examples Geoffrey Evans and Robert Anderson, 'The Political Conditioning of Economic Perceptions', *Journal of Politics*, 68 (2006), 194–207; and Michael S. Lewis-Beck, Richard Nadeau and Angelo Elias, 'Economics, Party and the Vote: Causality Issues and Panel Data', *American Journal of Political Science*, 52 (2008), 84–95.

<sup>3</sup> See the founding discussion in D. Roderick Kiewiet, *Macroeconomics and Micropolitics: The Electoral Effects of Economic Issues* (Chicago: Chicago University Press, 1983); and the current arguments by Michael S. Lewis-Beck and Richard Nadeau, 'Obama and the Economy in 2008', *Political Science & Politics*, 42 (2009), 479–83.

<sup>4</sup> See the pivotal paper by Richard Nadeau, Martial Foucault and Michael S. Lewis-Beck, 'Patrimonial Economic Voting: Legislative Elections in France', *West European Politics*, 33 (2010), 1261–77.

<sup>5</sup> Michael S. Lewis-Beck and Richard Nadeau, 'Economic Voting Theory: Neglected Dimensions', *Electoral Studies*, 30 (2011), 288–94.

<sup>6</sup> See, respectively, Lewis-Beck and Nadeau, 'Obama and the Economy in 2008'; and Lewis-Beck and Nadeau, 'Economic Voting Theory', on the 2008 US presidential election; Richard Nadeau, Martial Foucault and Michael S. Lewis-Beck, 'Assets and Risk: A Neglected Dimension of Economic Voting', *French Politics*, 9 (2011), 97–119; Martial Foucault, Richard Nadeau and Michael S. Lewis-Beck, 'La persistance de l'effet patrimoine lors des élections présidentielles françaises', *Revue française de science politique*, 61 (2011), 659–80, on French presidential elections; and Nadeau, Foucault and Lewis-Beck, 'Patrimonial Economic Voting', on French legislative elections.

<sup>7</sup> Michael S. Lewis-Beck and Martin Paldam, 'Economic Voting: An Introduction', *Electoral Studies*, 19 (2000), 113–21.

<sup>8</sup> In this connection, see a recent paper offering an in-depth treatment of the 2010 race: Harold D. Clarke, David Sanders, Marianne C. Stewart and Paul Whiteley, 'Valence Politics and Electoral Choice in Britain, 2010', *Journal of Elections, Public Opinion and Parties*, 21 (2011), 237–53.

multiple-dimensions of economic voting theory, which, taken together, help to define what we call the ‘*compleat* economic vote’.<sup>9</sup>

#### THEORY

Rival theories for explaining the national vote in democracies generally, and Britain in particular, are plentiful. They can be sorted by their leading variables: socio-logical, partisan, issues, leaders. A recent treatment of British elections examines the potency of models employing these four sets of variables, plus a fifth called the ‘economic voting model’, our primary interest here.<sup>10</sup> The idea that the economy links itself to British elections has a venerable pedigree. First, Stokes labels economics the valence issue par excellence.<sup>11</sup> Then, writing with Butler in *Political Change in Britain*, they elaborate:

issues of economic well-being [are] ... as close as any to being pure ‘valence’ issues. If we conceive of economic issues in dimensional terms, the electorate is not spread along a continuum of preference extending between good times and bad; its beliefs are overwhelmingly concentrated at the good times end of such a continuum.<sup>12</sup>

These authors go on to offer an early articulation of traditional reward–punishment economic voting theory: ‘the electorate’s response to the economy is one under which voters reward the Government for the conditions they welcome and punish the Government for the conditions they dislike’.<sup>13</sup> Current studies of economics as a valence issue for the British electorate are thoroughly exploited by, most recently, Clarke, Sanders, Stewart and Whiteley.<sup>14</sup> Their work carries on the important analytic distinctions that have developed in the economic voting literature, separating retrospective and prospective evaluations, and sociotropic and egocentric evaluations.<sup>15</sup>

Now we turn to the next dimension – the economy as a position issue. Further early theorizing by Stokes, responding to the spatial modelling ideas of Downs,<sup>16</sup> is relevant: ‘Let us call “position issues” those that involve advocacy of government actions from a set of alternatives over which a distribution of voter preferences is defined.’<sup>17</sup> Since that time, scholars of British elections have spilled considerable ink analysing the impact of

<sup>9</sup> ‘Compleat’ is an older form of the English word ‘complete’. We use it to emphasize the necessity of exploring all the parts, or dimensions, of economic voting theory. An early example of such usage shows itself in the title of Izaak Walton’s 1653 book on fishing, *The Compleat Angler*. See the discussion in Jess Stein, ed., *Random House Dictionary of the English Language, The Unabridged Edition* (New York: Random House, 1967), p. 301.

<sup>10</sup> Harold D. Clarke, David Sanders, Marianne C. Stewart and Paul Whiteley, *Political Choice in Britain* (Oxford: Oxford University Press, 2004).

<sup>11</sup> Donald E. Stokes, ‘Spatial Models of Party Competition’, *American Political Science Review*, 57 (1963), 368–77, p. 373.

<sup>12</sup> David Butler and Donald E. Stokes, *Political Change in Britain* (New York: St. Martin’s, 1969), p. 390.

<sup>13</sup> Butler and Stokes, *Political Change in Britain*, p. 392.

<sup>14</sup> Harold D. Clarke, David Sanders, Marianne C. Stewart and Paul Whiteley, *Performance Politics and the British Vote* (Cambridge: Cambridge University Press, 2009).

<sup>15</sup> On the theoretical origins of these differences, see especially Morris P. Fiorina, *Retrospective Voting in American National Elections* (New Haven, Conn.: Yale University Press 1981), pp. 6, 26); and Donald R. Kinder and D. Roderick Kiewiet, ‘Sociotropic Politics: The American Case’, *British Journal of Political Science*, 11 (1981), 129–61.

<sup>16</sup> Anthony Downs, *Economic Theory of Democracy* (New York: Harper and Row, 1957).

<sup>17</sup> Stokes, ‘Spatial Models of Party Competition’, p. 373.

position issues of all kinds on the voter, including – but going well beyond – economic position issues.<sup>18</sup>

A classic illustration of economics as a position issue comes from Butler and Stokes writing on nationalization, which they use as a lead example: ‘Many issues present alternative policies or conditions whose value is a matter of disagreement in the country. Nationalization is one of these’.<sup>19</sup> For instance, in 1966, 25 per cent of the British public favoured more nationalization of industry, 42 per cent favoured the status quo, 19 per cent favoured less, and 14 per cent had no opinion.<sup>20</sup> Many illustrations of position issues on economic policy come to mind: market regulation, income redistribution, welfare spending, the tax schedule, among others. Voters, we know, tend to take varying positions on issues of this sort. For example, some citizens favour more government regulation of business, while other citizens favour less. In this case, the regulation question could lead certain voters to support Labour (as the pro-regulation party), and other voters to support the Conservatives (as the anti-regulation party).

When economic voting is positional, the party closest to the voter’s policy view is chosen, in the manner described by Downs.<sup>21</sup> This means that the voter selects on the basis of preference, regardless of whether the party is in government or not. These economic voters are what Kiewiet labels *policy-oriented*, instead of *incumbency-oriented* from the parlance of the classical economic voting hypothesis.<sup>22</sup> A British example might be the behaviour of voters who, seeking to lower unemployment, always vote Labour because they feel Labour will always excel on that issue.

Finally, we turn to the last dimension – the economics of patrimony. This ‘new’ idea is actually old, and concerns the voter’s relationship to the means of economic production. What citizens own (or not) shapes their material interests, which in turn shapes their vote choice. By ownership we do not mean simply social class, as commonly measured objectively or subjectively.<sup>23</sup> Nor do we mean the link between income and vote, which represents a growing line of research.<sup>24</sup> Measures of class and income should of course stand as key control variables in any well-specified vote equation. But the notion of patrimony differs from these widely-used socio-demographic concepts. Page and Shapiro’s recent work about

<sup>18</sup> Mark Franklin, *The Decline of Class Voting in Britain* (Oxford: Oxford University Press, 1985); Anthony Heath, Roger M. Jowell and John K. Curtice, *How Britain Votes* (Oxford: Pergamon Press, 1985), p. 199; Richard Rose and Ian McAllister, *Voters Begin to Choose* (London: Sage Publications, 1986); Richard Rose and Ian McAllister, *The Loyalties of Voters: A Lifetime Learning Model* (London: Sage Publications, 1990); Bo Särilvik and Ivor Crewe, *Decade of Dealignment: The Conservative Victory of 1970 and Electoral Trends in the 1970s* (Cambridge: Cambridge University Press, 1983). ‘Issue voting’, as it is sometimes called, has also been well-pursued in American electoral studies; see the review in Michael S. Lewis-Beck, William G. Jacoby, Helmut Norpoth and Herbert F. Weisberg, *The American Voter Revisited* (Ann Arbor: The University of Michigan Press, 2008), chap. 8.

<sup>19</sup> Butler and Stokes, *Political Change in Britain*, pp. 188–9.

<sup>20</sup> Butler and Stokes, *Political Change in Britain*, p. 177.

<sup>21</sup> Downs, *Economic Theory of Democracy*.

<sup>22</sup> D. Roderick Kiewiet, *Macroeconomics and Micropolitics: The Electoral Effects of Economic Issues* (Chicago: Chicago University Press, 1983), chap. 2.

<sup>23</sup> Paul A. Abramson, John H. Aldrich and David W. Rohde, *Change and Continuity in the 2000 Elections* (Washington, D.C.: Congressional Quarterly Press, 2003), pp. 113–15; William H. Flanagan and Nancy Zingale, *Political Behavior of the American Electorate*, 11th edn (Washington, D.C.: Congressional Press Quarterly, 2006), pp. 115–18.

<sup>24</sup> Larry Bartels, *Unequal Democracy: The Political Economy of the New Gilded Age* (Princeton, N.J.: Princeton University Press, 2008); Jeffrey M. Stonecash, *Class and Party in American Politics* (Boulder, Colo.: Westview Press, 2000).

Americans' conception of wealth supports this idea. According to them, wealth is no mystery for most Americans and consists of 'your house value (subtracting mortgage value), your money in a bank, and any stocks, bonds and other assets you own'.<sup>25</sup>

The belief that what you own moulds your political action goes back to Marx and his theory of social change.<sup>26</sup> The economic structure of society forms itself from the relations of production between owners and workers. In a standard stylized illustration, the owners possess the land, equipment, buildings necessary to produce goods. The workers own only their bodies, which they employ labouring in factories owned by capitalists. The dynamic between those who possess property, such as factories, and those who possess only their hands, drives the political engine. Workers receive labour income (wages) and capitalists receive capital income (dividends). This usual dichotomy deeply affects the channel by which people may accumulate different types of assets, namely their wealth, and leads them to seek protection with their favoured public policies. Owners make political choices in their interest, while workers make political choices in their interest. These interests are inevitably opposed, so ensuring an ongoing class struggle. How to measure class? The indicators of class commonly used by social scientists today tap directly or indirectly income, occupation and education.<sup>27</sup> But these contemporary indicators manage empirically to account for just part of the classic ownership variable. Patrimony, which directly measures property ownership, seems much preferred, conceptually and quantitatively, to these more conventional and partial measures.

Let us take an example. Suppose Voter A has considerable wealth, say in the form of stocks. Suppose Voter B possesses only a little wealth, say in the form of a small savings account. We would expect Voter A to seek government economic policies that enhance his or her stock portfolio, while Voter B would simply seek policies that made his or her small savings secure. For the United States, the suggestion is that Voter A would be more likely to vote Republican, as they are seen as 'the party of business'. Such tendencies have been demonstrated to be case in the United States, at least for the 2008 presidential election.<sup>28</sup> A similar pattern has also been demonstrated in French presidential elections, by a more favourable vote for right-wing governments. Further, in Australia, which had the world's highest levels of private share-ownership in the 2000s, Donoghue *et al.* have observed that 'shareowners are from one and a half to three times as likely as non-shareowners to vote for the [conservative] Coalition'.<sup>29</sup> This finding, however, does suggest a difference between share ownership and home ownership as expressions of citizenship, since home owners' support for the Coalition was at best muted.<sup>30</sup>

<sup>25</sup> Benjamin I. Page and Lawrence R. Jacobs, *Class War? What Americans Really Think about Economic Inequality* (Chicago: University of Chicago Press, 2009), p. 38.

<sup>26</sup> The bibliography on Marxism has an almost paralysing vastness. Therefore, we suggest two simple points on the compass. First, Hobsbawm's brilliant edited volume on *The Communist Manifesto* (Karl Marx, Friedrich Engels and Eric J. Hobsbawm, *The Communist Manifesto: A Modern Edition* (London: Verso, 2012)); secondly, Popper's unparalleled critique (Karl Popper, *The Open Society and Its Enemies, vol. 2 (Hegel and Marx)* (London and New York: Routledge, 1945)).

<sup>27</sup> Lewis-Beck, Jacoby, Norpoth and Weisberg, *The American Voter Revisited*.

<sup>28</sup> Lewis-Beck and Nadeau, 'Obama and the Economy in 2008', pp. 479–83.

<sup>29</sup> Jed Donoghue, Bruce Tranter and Robert White, 'Homeownership, Shareownership and Coalition Policy', *Journal of Australian Political Economy*, 52 (2003), 58–82, p. 71.

<sup>30</sup> Patrick Troy, 'Suburbs of Acquiescence, Suburbs of Protest', *Housing Studies*, 15 (2000), 717–38; Ian McAllister, 'Housing Tenure and Party Choice in Australia, Britain and the United States', *British Journal of Political Science*, 14 (1984), 509–22.



For Britain, the question of ownership and the vote has been studied in various ways. The electoral implications of home ownership, in particular, have received extensive investigation.<sup>31</sup> For some authors, ownership is both a mark of social membership and the entry ticket to political participation, and liberal politicians have seen its development as a prime obligation of the State.<sup>32</sup> Support of private homeownership is then a way for the State to meet the 'right' to housing that emerged along with other civil, political and social rights associated with modern citizenship.<sup>33</sup> An outstanding finding is that home ownership tends to increase support for the Conservative party.<sup>34</sup> Besides, other forms of ownership have been examined, in looking at 'popular capitalism' and its impact on the vote.<sup>35</sup> Finally, in a pioneering and, as far as we know, stand-alone work, Charlot has shown that the number and type of assets (particularly stocks) owned by a voter was an important determinant of Tory (Conservative) support in the 1987 election.<sup>36</sup> Thus, the electoral politics of ownership has certainly been investigated in Britain. In this piece, we push this investigation still further, on three accounts. We tie together the various forms of ownership, bundling stocks, homes, rentals, savings and other assets into the overarching concept of patrimony. Each voter, for the first time, receives a summary score measuring his or her overall wealth, or patrimony. We also distinguish between two types of ownership, low-risk and high risk assets (see below) and explain why this

<sup>31</sup> Patrick Dunleavy, 'The Urban Basis of Political Alignment: Social Class, Domestic Property Ownership, and State Intervention in Consumption Processes', *British Journal of Political Science*, 9 (1979), 409–43; Patrick Dunleavy and Christopher Husbands, *British Democracy at the Crossroads* (London: George Allen & Unwin, 1985).

<sup>32</sup> Jed Donoghue, Bruce Tranter and Robert White, 'Homeownership, Shareownership and Coalition Policy', *Journal of Australian Political Economy*, 52 (2003), 58–82.

<sup>33</sup> Saunders, *A Nation of Home Owners*; Peter R. Saunders, 'Citizenship in a Liberal Society', in B. Turner, ed., *Citizenship and Social Theory* (London: Sage, 1993).

<sup>34</sup> David E. Butler and Dennis Kavanagh, *The British General Election of 1983* (London: Macmillan, 1984), pp. 296–7; Clarke, Sanders, Stewart and Whiteley, *Political Choice in Britain*, Table 4.3, p. 98. This finding, – the inclination of homeowners to vote for conservative parties – does not seem to extend to other democracies. For evidence about the United States, France and Australia showing that housing tenure had little impact on political behaviour, see McAllister, 'Housing Tenure and Party Choice in Australia, Britain and the United States'; Nadeau, Foucault and Lewis-Beck, 'Patrimonial Economic Voting'; Troy, 'Suburbs of Acquiescence, Suburbs of Protest', pp. 717–38; Donoghue, Tranter and White, 'Homeownership, Shareownership and Coalition Policy'.

<sup>35</sup> Anthony Heath, Geoffrey Evans, Julia Field and Sharon Witherspoon, *Understanding Political Change: The British Voter 1964–1987* (Oxford: Pergamon Press, 1991), chap. 8; Peter Saunders, 'Privatization, State Ownership and Voting', *British Journal of Political Science*, 25 (1995), 131–7; Donley T. Studlar, Ian McAllister and Alvaro Ascui, 'Privatization and the British Electorate: Microeconomic Policies, Macroeconomic Evaluations, and Party Support', *American Journal of Political Science*, 34 (1990), 1077–101.

<sup>36</sup> Monica Charlot, 'Un effet patrimoine?' in Monica Charlot, ed., *L'Effet Thatcher* (Paris: Economica, 1989), pp. 40, 42. Our study differs from Charlot's pioneering study on patrimonial voting in Britain on many accounts. First, we measure the assets owned by households rather than individuals, a more appropriate measure of personal wealth. Secondly, we exploit the distinction between low-risk and high-risk assets which appears more theoretically compelling than the concept of patrimonial diversity used by Charlot. Thirdly, our exploration of patrimonial voting is performed with a more developed voting model including controls for ideology and party identification. Fourthly, our estimation of the so-called 'effet patrimoine' (Jacques Capdevielle, Elisabeth Dupoirier, Gérard Grunberg, Etienne Schweisguth and Colette Ysmal, *France de gauche, vote à droite* (Paris: Presses de la Fondation nationale de science politique, 1981)) is based on more demanding multivariate techniques. Fifthly, our analysis of the impact of patrimony takes into account not only the direct effect of asset ownership on the vote but also its indirect effects through party identification, ideology and voters' preferences on taxation. Finally, these effects are explored as one of the various dimensions characterizing 'compleat' economic voting.

TABLE 1 *Voters' Economic Perceptions and Position on Taxation Fairness in the 2010 British General Election*

Panel A. Economic Perceptions	(%)
Better, same	42
Worse	34
Much worse	23
<i>N</i>	757
Panel B. Fairness in Tax Policy	
Rich 60 and poor 10	32
Rich 50 and poor 20	41
Rich 40 and poor 30	10
Rich 30 and poor 30	10
Don't know	8
<i>N</i>	762

*Panel A Question:* 'Would you say that over the past year the nation's economy has gotten much better, gotten better, stayed about the same, gotten worse, or gotten much worse?'. *Panel B Question:* 'Suppose a rich person has one pound sterling, and a poor person has one pound sterling. How much tax should be paid on that pound? Rich person pays 60 pence, poor person pays 10 pence; rich person pays 50 pence, poor person pays 20 pence; rich person pays 40 pence, poor person pays 30 pence; rich person pays 30 pence and poor person pays 30 pence.'  
*Source:* BCCAP 2010 (Wave 5).

distinction matters for voting behaviour (see below). Finally, we test the impact of such patrimony on the vote, within the framework of a fully developed economic voting model.

#### DATA AND MEASURES

The British electorate stands as one of the best studied in the world. The British Election Study (BES) alone has regularly fielded, since 1964, national survey samples at each general election. These investigations have been, arguably, second to none in their range and sophistication, and the 2010 BES is no exception. Nevertheless, though a comprehensive instrument, it does not generally administer all the economic voting items we need to test our multi-dimensional hypotheses. For this, special item batteries had to be designed, and they were fielded in Wave Five of the British Cooperation Campaign Analysis Project (BCCAP), in a national internet survey carried out just before the 10 May 2010 election. Further details on the survey methodology appear in Appendix 1 online, as does the wording of the items used to measure each variable subsequently analysed.

The economic items, our central focus, deserve special attention. To assess the economy as a valence issue, we use a classic sociotropic retrospective question, asking the respondent to evaluate the quality of national economic performance over the past year (with the responses eventually scaled 0–1). Table 1A presents the wording and the distribution on this variable, going into the 2010 British general election.

To assess the economy as a position issue, we employ a question on tax policy, an item first used in a pre-election survey of the 2008 US presidential election.<sup>37</sup> The question

<sup>37</sup> Lewis-Beck and Nadeau, 'Obama and the Economy in 2008', pp. 479–83.

assesses the respondent's commitment to income redistribution, by asking how much a rich person should be taxed, as compared to a poor person (with the responses scaled 0–1). The results for this item are reported in Table 1B.<sup>38</sup>

To assess the economy as an issue of patrimony, the respondent is asked about ownership of a number of assets: house or flat, second home, savings account, a business, land, a farm, stocks/shares or rental properties. The possession of assets is aggregated and combined into two components: low-risk assets and high-risk assets (each eventually scaled 0–1). Because the patrimonial variable, conceptually and empirically, is new and perhaps controversial, we give it special attention below.

### *The Patrimonial Variable: Assets and Risk*

The several empirical papers by economists examining the distribution of wealth in the British economy have mainly focused on the determinants of wealth inequalities,<sup>39</sup> and more recently on the share of top incomes in wealth accumulation over time.<sup>40</sup> Britain demonstrates a common pattern seen in developed democracies, where income inequalities have increased recently, mainly because of a concentration of top incomes and a higher increase of capital inequalities compared with the labour income distribution. To understand such an evolution, it is worth looking at the composition of the individual wealth portfolio. However, the published income series, taken uncritically, provide misleading information about the nature of wealth accumulated by individuals. The increase of average household income in Britain by about 60 per cent between 1977 and 1991, and 22 per cent between 1991 and 2007,<sup>41</sup> reveals a fallacious stability of wealth for the more recent years when we focus only on the income variable. First, the longitudinal trend of household income hides the faster growth for the top fifth during the last fifteen years (in 2007 the top fifth gains 5.5 times more than the bottom fifth, against 3 times more in 1977). Secondly, the growth of wealthier households is not directly derived from labour revenues, but rather from capital revenues drawn from financial returns and business investments.

Therefore, a better approach to the wealth question is to investigate the transformation of the patrimony bundle of Britain households. Banks, Blundell and Smith have used the British Household Panel Survey, and the American Panel Study of Income Dynamics, to compare the dynamics of wealth accumulation.<sup>42</sup> They found that British households hold relatively small amounts of financial assets – including equities in

<sup>38</sup> Interestingly, they differ greatly from US preferences, where the majority of that electorate does not favour a progressive tax structure, in contrast to British electorate here; Lewis-Beck and Nadeau, 'Obama and the Economy in 2008'.

<sup>39</sup> Anthony B. Atkinson and Emmanuel Saez, 'Top Incomes in the Long Run of History', in Anthony B. Atkinson and Thomas Piketty, eds, *Top Incomes: A Global Perspective* (Oxford: Oxford University Press, 2009), chap. 13.

<sup>40</sup> Anthony B. Atkinson, 'Top Incomes in the UK over the Twentieth Century', *Journal of the Royal Statistical Society*, 168 (2005), 325–43; Anthony B. Atkinson, 'The Distribution of Top Incomes in the United Kingdom 1908–2000', in Anthony B. Atkinson and Thomas Piketty, eds, *Top Incomes over the Twentieth Century: A Contrast between Continental European and English-Speaking Countries* (Oxford: Oxford University Press, 2007).

<sup>41</sup> Francis Jones, Daniel Annan and Saef Shah, 'The Distribution of Household Income, 1977 to 2006/07', *Economic and Labour Market Review*, 2:12 (2008), 18–31.

<sup>42</sup> James Banks, Richard Blundell and James P. Smith, 'Wealth Portfolios in the UK and the US', *NBER Working Paper* 9128 (2002).



stock – compared to American households, but a quite similar share compared to French households.<sup>43</sup>

British households move into home ownership at relatively young ages, and a large fraction of their individual wealth is concentrated in housing. These findings suggest that, especially in Britain, there have been some fundamental changes in national policies aimed at encouraging wider rates of home ownership and greater participation in the equity market. The growth of owner-occupation in Britain has been facilitated since the Second World War by the implementation of tax advantages from the 1960s onward.<sup>44</sup> In the 1980s, the Thatcher Government launched a massive sale from the social housing sector to willing tenants.<sup>45</sup> Around this time, coinciding with the flotation of previously nationalized public utilities such as British Telecom (1984) and British Gas (1986), a further set of measures aimed at promoting a ‘share-owning democracy’ – namely tax-favoured employee share ownership schemes – was introduced.

A second and recent generation of surveys led by the Office for National Statistics between July 2006 and June 2008, namely the Wealth and Assets Survey, collected data on 30,595 households examining, among other things, the level of assets, savings and debt, and saving for retirement. From this survey, we learn that 92 per cent of British households have a current account, 68 per cent are homeowners, 62 per cent have a savings account, 22.2 per cent hold stocks and 10.5 per cent have subscribed to life assurance. All in all, this survey provides a portrayal of British property and financial wealth whose major trends are very close to the electoral data that we exploit in Table 2.

The things one owns, an individual’s ‘patrimony’, can be defined, in sum, as cumulated assets held.<sup>46</sup> It is limited to tangible assets, ignoring debt. Table 2A shows the distribution of assets about the time of the 2010 British general election. There are six measured components: house or flat, second home, savings, stocks/shares, business or land, rental property. As might be expected, given the above discussion, the most frequently occurring assets are savings accounts, at 69 per cent, and home ownership, at 65 per cent.<sup>47</sup> Also, we observe that stock ownership stands at 26 per cent. Taken all together, these estimates, which closely parallel the above recounted estimates, from much more elaborate surveys, further bolster our confidence in the quality of our commissioned 2010 survey.

As suggested in Table 2A, assets can be sorted into low-risk and high-risk types. For theoretical reasons, this distinction has value. We assume, first, that citizens choose assets according to their degree of risk aversion. Those who wish to avoid risk tend to

<sup>43</sup> Data from the French Election Studies and the CCAP project for the 2008 US presidential election confirm that the proportion of stock owners is quite similar in France and Britain and clearly higher in the United States; this reassuring finding suggests that the survey items used in the study at hand aptly capture the structure of wealth ownership in different countries; for the French case, see Nadeau, Foucault and Lewis-Beck, ‘Assets and Risk’; Nadeau, Foucault and Lewis-Beck, ‘Patrimonial Economic Voting’; and Foucault, Nadeau and Lewis-Beck, ‘La persistance de l’effet patrimoine lors des élections présidentielles françaises’; for the US case, see Lewis-Beck and Nadeau ‘Economic Voting Theory’.

<sup>44</sup> Patrick Dunleavy, *The Politics of Mass Housing in Britain* (Oxford: Oxford University Press, 1981).

<sup>45</sup> Saunders, *A Nation of Home Owners*.

<sup>46</sup> Margo Berman, ‘Examining Risk Attitudes’, *Complexity*, 9:5 (2004), 25–30; Ted To, ‘Risk and Evolution’, *Economic Theory*, 13 (1999), 329–43.

<sup>47</sup> A good portion of these properties are mortgaged. However, as shall be seen below in fn. 59, there are no significant differences in the vote choices of these respondents, compared to those who own their homes outright.

TABLE 2 *Asset Ownership in Britain, 2010*

Panel A. The distribution of asset ownership	
Low-risk assets	
House or apartment	65
Country house	3
Savings account	69
High-risk assets	
Stocks	26
Business, land or farm	8
Rental properties	7
<i>N</i>	762
Panel B. The structure of asset accumulation in the UK	
Ownership of low-risk asset	
0 item	15
1 item	35
2 items	49
3 items	1
Ownership of high-risk assets	
0 item	66
1 item	27
2 items	6
3 items	0
<i>N</i>	762

*Note:* Panel A: Entries represent the percentage of households owning specific assets. For details about which items belong to each category of assets, see the online appendix. Panel B: Entries represent the percentage of households owning the number of assets indicated for each category of assets. For details about which items belong to each category of assets, see the online appendix.

*Source:* BCCAP 2010 (Wave 5).

accumulate assets that generate a highly certain (but reduced) rate of return. The two types of assets, risky and non-risky, require different amounts of information for their acquisition or maintenance. A savings account, for instance, seems non-risky, since it needs little ongoing information to sustain it. The same logic applies to certain other assets, such as a home. When the asset involves savings or housing, then, little information is needed, and the risks of heavy loss are low, at least in comparison to stock or business assets.<sup>48</sup>

Following this line of argument, we categorized the six asset items as low risk v. high risk, and then constructed two scales. Each is an additive index scale, arrived at by summing the dichotomized items. On the Low-Risk Scale a top score of 3 registers someone who has a house or flat, a second home and a savings account, while a score of 0 registers someone who has none of these things. Similarly, on the High-Risk Scale, a top score of 3 registers someone who has stocks, some sort of business and owns rented

<sup>48</sup> Shlomo Benartzi and Richard H. Thaler, 'Myopic Loss Aversion and the Equity Premium Puzzle', *Quarterly Journal of Economics*, 110 (1995), 73–92; Olof Dahlback, 'Saving and Risk Taking', *Journal of Economic Psychology*, 12 (1991), 479–500; C. Huang and R. H. Litzenberger, *Foundations for Financial Economics* (New York: Elsevier Science, 1988). For a more detailed discussion of the theoretical argument behind this distinction, see Nadeau, Foucault and Lewis-Beck, 'Assets and Risk'.

property, while a 0 registers someone with none of these things.<sup>49</sup> In Table 2B, we observe the distribution of cumulated assets in 2010 Britain, within these two categories. For the low-risk group, the largest category (49 per cent) has two items, say a home and a savings book. For the high-risk group, the largest category (for those having anything at all), is one item, most probably stocks/shares (at 27 per cent).

The correlations (Pearson's  $r$ ) of the component-items are consistent with the patterns observed in Table 2. The Low-Risk scale defines itself empirically largely by home ownership and savings (each correlating 0.74 with the scale), but the High-Risk scale defines itself empirically largely by stocks/shares (correlating 0.78 with the scale). In addition, observe the small correlation between family income and each scale score, i.e., 0.29 and 0.33, respectively. These low correlations show that asset accumulation is something very different from earned income. This finding reinforces the argument that assets and income are by no means measuring the same thing, and may indeed be able to exert their own influences on the vote.

#### HYPOTHESES

Before moving on to more complicated analysis, it is worth stating our main hypotheses and testing them in bivariate form. After all, if the simple economic relationships postulated do not appear, it is unlikely that they will be conjured by more serious multivariate analysis. They are as follows, in order: the Valence Hypothesis (H1); the Position Hypothesis (H2); the Patrimony Hypothesis (H3):

HYPOTHESIS 1: As national economic perception worsens, Tory vote intention increases.

HYPOTHESIS 2: As the preference for tax progressiveness decreases, Tory vote intention increases.

HYPOTHESIS 3: As patrimony – particularly high-risk assets – increases, Tory vote intention increases.

In Table 3A, we see the relationship between economic perception and Tory vote. The percentage differences clearly support the Valence Hypothesis, with 58 per cent seeing economic downturn declaring for the Tories, in contrast to only 31 per cent who saw economic upturn. In Table 3B, we see the relationship between tax progressiveness and Tory vote. The Position Hypothesis is supported, and to about the same degree. Among those who favour little or no progressiveness (40–30 or 30–30), 62 per cent declare for the Tories, in contrast to only 30 per cent, among those who favour the highest level of progressiveness (60–10).

For the Patrimony Hypothesis, we break the data into the two components: low-risk assets and high-risk assets. It is worth elaborating further on the theoretical reasons for this distinction. People vary in the amount of risk they are willing to take to enlarge their holdings. Attitude to risk is a decisive element in an investor's strategy.<sup>50</sup> In terms of theory, asset decision-making can follow one of three types: risk-aversion, risk-neutrality, risk-taking.<sup>51</sup> Unfortunately, we cannot tap the voter's risk attitude directly. Hence, we

<sup>49</sup> These variables were rescaled between 0 and 1. See the appendix available online.

<sup>50</sup> Frank Knight, *Risk, Uncertainty, and Profit* (Boston, Mass.: Hart, Schaffner and Marx, 1921).

<sup>51</sup> Margo Bergman, 'Examining Risk Attitudes', *Complexity*, 9:5 (2004), 25–30; Ted To, 'Risk and Evolution', *Economic Theory*, 13 (1999), 329–43.

TABLE 3 *Economic Perceptions, Fairness on Tax Policy, Asset Ownership and the Tory Vote in the 2010 British Election*

Panel A. Economic Perceptions		(%)	
Better, same		31	
Worse		49	
Much worse		58	
<i>N</i>		714	
Panel B. Fairness in Tax Policy			
Rich 60 and poor 10		30	
Rich 50 and poor 20		44	
Rich 40 and poor 30/		62	
Rich 30 and poor 30			
<i>N</i>		667	
Panel C. Patrimony		Distribution	Vote
Low-Risk Assets			
0, 1 item		50	39
2, 3 items		50	48
High-Risk Assets			
0 item		67	40
2+ items		33	51
<i>N</i>		762	716

Note: Entries represent the percentages supporting the Conservatives.

Source: BCCAP 2010 (Wave 5).

judge it indirectly, according to the amount of information different types of assets typically require for their efficient management. Such an idea finds support in micro-economic investigations of savings and risk preferences. For instance, Arrondel, followed by Arrondel and Calvo Pardo, have shown that risk-averse individuals hold a clearly smaller asset portfolio than risk-seeking individuals.<sup>52</sup> People wishing to avoid risk tend to select investments with a secure, but lower, rate of return. Information costs become critical for these households. Our assets typology demarcates two kinds – risky versus non-risky – and they are quite different in the amount of information they require for their effective management. A savings account, for instance, with its fixed rate of return can be considered non-risky; it does not demand close information monitoring. The same logic applies for housing assets. In these examples the information costs, and the related ownership risks, seem small compared to the acquisition of businesses, rentals or stocks.<sup>53</sup> Overall, then, attitudes towards risk help account for an individual's investment choices.

Recall that we grouped the six asset items into high-risk and low-risk scales. The low-risk scale averages the scores on 'savings accounts', 'house or flat', and 'second home'.

<sup>52</sup> Luc Arrondel, 'Risk Management and Wealth Accumulation Behavior in France', *Economics Letters*, 74 (2002), 187–94; Luc Arrondel and Hector Calvo Pardo, 'Les Français sont-ils prudents? Patrimoine et risque sur les revenus des ménages', *PSE Working Papers 2007–16* (Paris: School of Economics, École normale supérieure, 2008).

<sup>53</sup> Benartzi and Thaler, 'Myopic Loss Aversion and the Equity Premium Puzzle'; Dahlback, 'Saving and Risk Taking'; Huang and Litzenberger, *Foundations for Financial Economics*.

The high-risk scale averages the scores on ‘business’, ‘rentals’ and ‘stocks’. It is the types of investment a voter has – less risky and routine versus risky and complicated – that will shape policy preferences and, finally, party choice. Why would voters with more high-risk assets be more inclined to support parties on the right? Because governments on the right claim they will do better at lowering taxes, decreasing business regulation and freeing financial markets.<sup>54</sup> Their rhetoric more often supports free-market approaches, as opposed to state-run solutions favoured by the left.<sup>55</sup> Free-market mechanisms tend to benefit risk-seekers, who are able to achieve higher profit margins. Still, once in the market, there is the possibility of greater loss. Therefore, as reward, risk-seekers expect a higher rate of return, while the risk-averse seek protection and security. Given these proclivities, high-risk voters will favour free-market politics and parties, more so than low-risk voters. Fortunately, we have data to which we now turn, in order to test these propositions.<sup>56</sup>

First, observe in Table 3C that more assets, within either category, leads to a higher percentage of Tory voting, so supporting H3. However, note further that the apparent effect is somewhat stronger among the high-asset group. (Comparing percentage differences, the figures are 9 points and 11 points, respectively). This result, which suggests a difference in political impact between the high-risk and low-risk groups, we pursue below.

#### MODELS

Economics, as important as it may be for vote choice, does not stand as the sole determinant, even in its multiple dimensions. We know that other forces, long-term and short-term, act on this political behaviour. The classic framework, derived from *The American Voter*, has served British election studies well, as least as a starting point for analysis.<sup>57</sup> Recalling their pivotal theoretical construct, the funnel of causality, certain explanatory variables occur before others in time.<sup>58</sup> Socio-demographic variables are the most remote and, in current nomenclature, most fully possess exogenous status. That is, they are more or less fixed, unchanging over time and, while they influence the vote, the vote does not influence them. Classic examples of these are gender and social class.

<sup>54</sup> Alberto Alesina and Howard Rosenthal, *Partisan Politics, Divided Government, and the Economy*, (New York: Cambridge University Press, 1995); Carles Boix, ‘Partisan Governments, the International Economy and Macroeconomic Policies in OECD Countries, 1964–93’, *World Politics*, 53 (2000), 38–73.

<sup>55</sup> Herbert McClosky and John Zaller, *The American Ethos: Public Attitudes towards Capitalism and Democracy* (Cambridge: Cambridge University Press, 1984).

<sup>56</sup> As discussed, earlier work has shown that home ownership was linked to Conservative support (this finding does not extend to the democracies of the United States, Australia and France, see fnn. 30–33). This may have changed as the memories of the 1980s sale of social housing by the Thatcher Government faded. Furthermore, besides being a low-risk investment, home ownership is also increasingly perceived as a social right associated with modern citizenship. See Saunders, *A Nation of Home Owners*; Saunders, ‘Citizenship in a Liberal Society’. Overall, the motivations and dispositions associated with home ownership suggest that its impact on vote choice will be less pronounced than that for high-risk assets.

<sup>57</sup> Angus Campbell, Philip E. Converse, Warren E. Miller and Donald E. Stokes, *The American Voter* (New York: Wiley and Sons, 1960); Butler and Stokes, *Political Change in Britain*; Clarke, Sanders, Stewart and Whiteley, *Political Choice in Britain*; Clarke, Sanders, Stewart and Whiteley, *Performance Politics and the British Voter*.

<sup>58</sup> On the funnel of causality, see Campbell, Converse, Miller and Stokes, *The American Voter*, chap. 2; for a graphical update of the funnel, see Lewis-Beck, Jacoby, Norpoth and Weisberg, *The American Voter Revisited*, chap. 2.

TABLE 4 *The Impact of Assets on Vote, Ideology, Conservative Party Identification and Economic Positioning (Logistic Regressions, British General Election, 2010)*

	Tory voting intentions	Ideology	Tory ID	Position	Tory voting intentions
Age	0.60* (0.42)	0.79** (0.44)	0.73* (0.38)	-1.43** (0.43)	-0.48 (0.78)
Female	0.45** (0.18)	-0.08 (0.19)	0.61** (0.16)	-0.12 (0.19)	-0.01 (0.33)
Education	-0.51* (0.35)	-1.28** (0.37)	-0.23 (0.31)	-0.04 (0.36)	-0.89 (0.64)
Occupation	-0.23 (0.21)	-0.15 (0.22)	-0.23 (0.19)	0.34 (0.21)	-0.05 (0.39)
Region	-0.31 (0.20)	-0.52** (0.22)	-0.47** (0.18)	0.04 (0.21)	0.15 (0.36)
Income	1.16** (0.42)	1.30** (0.43)	0.84** (0.37)	0.41 (0.42)	0.80 (0.76)
Low-risk assets	0.24 (0.39)	0.22 (0.42)	0.18 (0.36)	-0.22 (0.40)	0.25 (0.69)
High-risk assets	1.00** (0.46)	1.17** (0.48)	0.84** (0.42)	0.94** (0.45)	-0.12 (0.86)
Tory ID	-	-	-	0.71** (0.23)	4.39** (0.40)
Ideology	-	-	-	0.57** (0.21)	0.86** (0.34)
Valence	-	-	-	-	0.90** (0.41)
Position	-	-	-	-	1.30** (0.47)
McFadden's Pseudo- $R^2$	0.03	0.06	0.03	0.06	0.56
$N$	568	534	599	501	480

Note: Entries are logistic regression coefficients in the first, second and fifth columns (vote models and ideology) and ordered logistic regression coefficients in the third and fourth columns (party identification and taxation preferences) with standard errors in parentheses and intercepts not shown. For details about the variables and the scales, see the online appendix.

Source: BCCAP 2010 (Wave 5). \*\* $p \leq 0.01$ , \* $p \leq 0.05$ , one-tailed tests.

Our variable of patrimony stands as a new socio-demographic variable in a voting behaviour model. Therefore, it is useful to challenge its status directly, testing whether it demonstrates a statistically significant effect, after traditional socio-demographic variables have been controlled. First, then, we propose the following revised socio-demographic model of vote choice:

$$\text{Vote} = f(\text{gender, age, education, region, patrimony, income and occupation}). \quad (1)$$

Note that among these usual socio-economic status (SES) variables are income, education and occupation. By their inclusion, they make statistical survival of patrimony especially difficult, to the extent that it is no more than a surrogate for class or income. In sum, does patrimony manage independent effects, after these controls? The results appear in Table 4, in a logistic regression on 2010 British vote intention (Tory v. not-Tory).



In Table 4 (column 1) high-risk assets, a patrimony measure, achieves statistical significance, despite these controls. It is important to emphasize that patrimony here does not appear to be a mere proxy for social class. In this equation, there are a number of variables that have been used as indicators of social class – education, income and occupation. Even with these class indicators taken into account, the patrimony variable manages an independent effect. The implication is that patrimony does add something to the explanation, something that usual measures of class do not.

Further, observe that low-risk assets do not find significance. This suggests that it not just assets *per se*, but how assets are perceived, that counts for politics. The holding of low-risk assets, such as a home, does not invoke a political object, at least in this election.<sup>59</sup> But the holding of high-risk assets, such as stock, does. The voter who has stock appears to take into account which party will better serve that portfolio. In that sense, there is a subjective, or endogenous, component to the patrimonial vote. Such potential endogeneity makes it important to control directly for relevant political attitudes, such as party identification and left–right ideology, which may themselves be endogenous to some extent.

Does possession of high-risk assets relate to these relevant political attitudes? Yes. Such a pattern continues with the estimation of the influence of patrimony on party identification and ideology. High-risk assets appear to heighten Conservative party identification and right-wing ideological formation (see Table 4, columns 2 and 3, respectively). Finally, it also seems to motivate economic policy on taxation. As the estimates of Table 4 (column 4) indicate, those with more high-risk assets endorse a less progressive policy. In sum, these various results on patrimonial effects in Table 4, showing direct and indirect manifestations of political influence, suggest the strategic role patrimony, at least high-risk patrimony, can place in the vote calculus.

Having established the role of patrimony, we can turn to the vote impact of the other economic variables – valence and position. Thus, we expand the model specification, as follows:

$$\text{Vote} = f(\text{socio} - \text{demographics, party, ideology, valence, position}). \quad (2)$$

Note that the socio-demographic component now includes the traditional variables, plus patrimony, i.e., the specification of Equation 1. In addition, the long-term variables of party identification and left–right ideology are added. The former serves as a critical control against partisan bias within the economic variables. The latter serves as a pervasive control on the role of other issues, a ‘super-issue’ variable, as ideology is sometimes called.<sup>60</sup> These extensive controls make it difficult for economic valence and policy position to exhibit an independent effect. But they do, as Table 4 (column 5) shows.

In a model that captures about three-fifths of the variance in vote intention, according to this pseudo- $R^2$ , valence and position both have statistically significant effects. The effect of valence economics is perhaps not surprising. After all, the impact of sociotropic

<sup>59</sup> Furthermore, it makes no difference whether the homes are mortgaged or not. First, bivariate analyses show virtually no differences between respondents owning their home outright and those owning it with a mortgage: support for the Conservative parties in both groups is the same at 45 per cent (the comparable figures for Labour are 19 and 17 per cent respectively). Secondly, this variable (mortgage = 1, 0 otherwise) is never significant when included in our models.

<sup>60</sup> On this point, see Lewis-Beck, Jacoby, Norpoth and Weisberg, *The American Voter Revisited*, pp. 223–9.

TABLE 5 *The Effect of High-Risk Assets on the Conservative Vote (British General Elections, 2010)*

Variation for high-risk assets	Change in probability of voting Conservative
0.33	0.12
0.67	0.24
1.00	0.34

*Note:* Entries are changes in probabilities of voting Conservative associated with ownership of one, two or three high-risk assets. The total impact of high-risk assets on the vote is calculated by taking into account the direct and indirect effects (through ideology, party identification and economic positioning) associated with changes in the number of high-risk assets owned (change from 0 to 1 scored 0.33, from 0 to 2 scored 0.67, and 0 to 3 scored 1.0). Since the direct effect of high-risk assets on the vote is not statistically significant, only the indirect effects are taken into account in the simulations. The simulations were performed using the software developed by Michael Tomz, Jason Wittenberg and Gary King, *Clarify: Software for Interpreting and Presenting Statistical Results* (© 1998–2003, Version 2.1).  
*Source:* BCCAP 2010 (Wave 5).

retrospective economic voting in British general elections has been established for some time.<sup>61</sup> What is surprising is the strength of position economics, even in the face of controls on the other economic dimensions (of valence and patrimony). The position coefficient is highly statistically significant, at 0.001. Furthermore, it is substantively significant. That is, position economics has slightly less than one-and-a-half times the impact on vote intention that valence economics does.<sup>62</sup>

What about the direct effects of patrimony, in this more fully specified model? As can be seen, they wash out, with neither low-risk nor high-risk assets coming close to conventional levels of statistical significance. Fortunately, the meaning of this result is clear, because of the foregoing estimates in Table 4 (columns 2–4), concerning the impact of patrimony on party identification, left–right ideology and economic position. In other words, while patrimony has no direct effect on the vote, it has indirect effects, passed through the more endogenous variables of party, ideology and position. To quantify this indirect effect, in its multiple streams, it is necessary to specify a multi-equation model and calculate the indirect effects with a path analysis.

Thus, we postulate a block-recursive model, with four equations, one for vote, and one each for party, ideology and position.<sup>63</sup> Patrimony passes its influence to the vote via the more endogenous variables of party, ideology and position. The calculation of its total effect on the vote, operating through these multiple pathways, appears in Table 5. We observe that, as the possession of high-risk assets moves from a small value to a large value, the probability of Conservative support increases by 22 percentage points ( $0.34 - 0.12 = 0.22$ ).

This block-recursive model, with its main paths, appears in Figure 1. We observe the indirect influences of patrimony on the vote. Also, we observe the direct effects of the

<sup>61</sup> Clarke, Sanders, Stewart and Whiteley, *Political Choice in Britain*, chap. 4.

<sup>62</sup> Since the two variables are scaled to the same, 0–1 metric, the magnitude of their coefficients can be compared:  $1.30 / 0.90 = 1.44$ .

<sup>63</sup> For a full discussion of block-recursive modelling, and its assumptions, see David Kaplan, *Structural Equation Modeling: Foundations and Extensions* (Thousand Oaks, Calif.: Sage, 2000); and Peter Kennedy, *A Guide to Econometrics*, 6th edn (New York: Wiley and Sons, 2008).

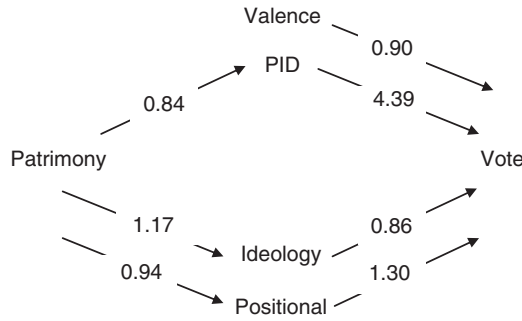


Fig. 1. The Tory vote: a block-recursive model

economic variables, and the anchoring variables of party and ideology. Because the variables have the same 0–1 metric, comparisons of direct effect are possible. Several things are worth noting. As expected, party identification dominates, with the largest coefficient (4.39). The impact of the economic variables is weaker. However, note that valence economics exercises almost the same influence as ideology (i.e., 0.90 vs. 0.86, respectively). Furthermore, and perhaps surprisingly, position economics has the second strongest coefficient of all, at 1.30. Clearly, position economics should not be neglected in future British voting models.

CHALLENGES

From these results, it seems that the notion of a ‘compleat economic voter’ has merit. Three economic dimensions – valence, position and patrimony – appear to influence the vote. If any one of these dimensions is not specified, the overall economic impact on the vote is underestimated. Moreover, this three-dimensional economic voting model shows through, in a multi-equation specification that includes stiff statistical controls. Still, objections concerning the scope of the findings can be raised, as follows. First, they come from but one election. Secondly, that one election is not well explained. Thirdly, the model has the wrong dependent variable. Fourthly, of the three dimensions only one, valence, deserves the label of economic voting. Fifthly, even if the positional economic voting is accepted as a dimension, the progressive tax item is a poor representative. Below, we address each objection, in turn.

First, the results are from just one British contest. However, similar results – significant and expected economic voting effects from valence, position and patrimony – have been demonstrated for other elections, in other advanced democracies. For the United States, see the relevant work on how the three dimensions performed in the 2008 presidential election.<sup>64</sup> For France, see in particular the relevant work on patrimony in multiple presidential and in legislative elections.<sup>65</sup> Finally, for Australia, the differential impact of ‘home ownership’ and ‘share ownership’ on political preferences provides further support

<sup>64</sup> Lewis-Beck and Nadeau, ‘Obama and the Economy in 2008’.

<sup>65</sup> Michael Lewis-Beck, Richard Nadeau and Éric Bélanger. *French Presidential Elections* (Basingtoke, Hants.: Palgrave Macmillan, 2011, forthcoming); Nadeau, Foucault and Lewis-Beck, ‘Assets and Risk’; Nadeau, Foucault and Lewis-Beck, ‘Patrimonial Economic Voting’.

for distinguishing between low-risk and high-risk assets for explaining vote choice.<sup>66</sup> These particular British findings, then, are not unique.

Secondly, our primary purpose is not to explain the 2010 British election, but to break new ground in economic voting theory. However, in the course of confirming (or disconfirming) our main hypotheses, a broad model specification of the vote had to be elaborated. That model, in final form, explains 56 per cent of the variance in vote choice, according to the McFadden  $R^2$ , column 5, Table 4.<sup>67</sup> That model fit actually exceeds the model fit generated for the fullest specification ('the Composite Model') offered by Clarke *et al.* in their general explanation of the 2010 vote, where the maximum McFadden pseudo- $R^2$  equals 0.55.<sup>68</sup> Furthermore, when the percentage of votes correctly predicted is examined for these two models, the results are 89.0 per cent and 88.8 per cent, respectively. In other words, our model, although not primarily intended to, explains the 2010 choice extremely well.<sup>69</sup>

Thirdly, our model thus far has focused on the dichotomous choice, between the Tories and other parties. While this reads well in terms of theory, e.g., more patrimony means more Tory voting, it is 'wrong' in the sense that valence economic voting assumes punishment is meted out against the incumbent, in this case Labour (not the Tories). The implication is that, with the right dependent variable – Labour v. other parties – results would be different. To discuss this topic in a crisp manner, we turn to a multinomial approach, with the Conservatives as the reference choice against the other two main party choices – Labour and the Liberal Democrats. Using this as our new dependent variable, we replicate our main analyses (see Table 6). The highlights are as follows. High-risk assets (HRA) are strongly tied to support for Labour and the Liberal Democrats (see Columns 1 and 2) in the simple SES voting model (the expected sign is negative). In reproducing the analysis for the Ideology dependent variable, the coefficient for HRA is even stronger than before. Furthermore, as expected, HRA is strongly linked to Labour Party Identification (column 4). The replicated result for Positional economic voting as the dependent variable (column 6) is in the expected direction, with the coefficient slightly higher than before. As confirming as the foregoing results are, our deeper concern is with the results for the complete voting model, displayed in columns 7 and 8. The direct impact of valence and positional economics on incumbent Labour party vote comes through clearly (with its negative sign since we use the same inverse coding as before, from positive to negative), as do the indirect effects of patrimony through Ideology, Party Identification and Attitudes towards taxation (positional). Thus, with the 'right' dependent variable – a Labour incumbent – the essential economic voting results remain intact.

<sup>66</sup> Donoghue, Tranter and White, 'Homeownership, Shareownership and Coalition Policy'; Troy, 'Suburbs of Acquiescence, Suburbs of Protest'.

<sup>67</sup> Of the various available pseudo- $R^2$ , the McFadden appears preferred. With logistic regression, there are many pseudo- $R^2$ , in contrast to the template  $R^2$  from ordinary least squares regression. Considerable work has been done comparing the qualities of the different pseudo- $R^2$  from binomial logistic regression equations. One view is that, of the dozen or so available, the McFadden is to be preferred, because it mimics most closely the conservative, statistically desirable, properties of the ordinary  $R^2$ . Scott Menard, *Applied Logistic Regression Analysis, Second Edition, No.106* (Thousand Oaks, Calif.: Sage, 2002), chap. 2.

<sup>68</sup> Clarke, Sanders, Stewart and Whiteley, 'Valence Politics and Electoral Choice in Britain', Table 2.

<sup>69</sup> Moreover, it does it parsimoniously, with only 12 independent variables, instead of 38 independent variables as required in the model by Clarke, Sanders, Stewart and Whiteley, 'Valence Politics and Electoral Choice in Britain', Table 2.

TABLE 6 *The Impact of Assets on Vote, Ideology, Party Identification and Economic Positioning (Multinomial, Logistic and Ordered Logistic Regressions, British General Election, 2010)*

	Vote			Party ID			Vote	
	Labour	Lib-Dem	Ideology	Labour	Lib-Dem	Position	Labour	Lib-Dem
Age	-0.04 (0.61)	-1.31** (0.50)	0.82* (0.48)	0.04 (0.60)	-2.35** (0.62)	-1.31** (0.47)	-0.68 (1.31)	-0.23 (0.93)
Female	-0.45* (0.27)	-0.23 (0.22)	0.04 (0.21)	-0.62** (0.26)	-0.46* (0.28)	-0.15 (0.20)	-0.55 (0.54)	-0.19 (0.39)
Education	0.58 (0.50)	0.76* (0.43)	-1.46** (0.41)	0.37 (0.48)	0.27 (0.54)	-0.02 (0.40)	1.64 (1.09)	1.89** (0.79)
Social Class	0.23 (0.31)	0.38 (0.26)	-0.18 (0.25)	0.26 (0.29)	0.58* (0.32)	0.39 (0.24)	0.40 (0.67)	-0.09 (0.48)
Region	0.50* (0.28)	0.27 (0.25)	-0.43* (0.24)	0.95** (0.28)	0.48 (0.31)	0.19 (0.23)	-0.11 (0.59)	-0.11 (0.43)
Income	-0.97 (0.61)	-1.20** (0.50)	1.27** (0.47)	-1.24** (0.61)	-0.96 (0.60)	0.79* (0.45)	-0.80 (1.27)	-1.44 (0.92)
Low-risk assets	-0.44 (0.57)	0.09 (0.48)	0.06 (0.46)	-0.42 (0.56)	0.06 (0.60)	0.10 (0.45)	-0.13 (1.14)	0.39 (0.85)
High-risk assets	-1.60** (0.75)	-1.02* (0.57)	1.37** (0.53)	-1.84** (0.71)	-0.27 (0.65)	-0.97* (0.50)	-1.22 (1.52)	-1.11 (1.10)
Labour ID	-	-	-	-	-	-0.54* (0.31)	8.19** (1.00)	3.57** (0.69)
Liberal-Democrat ID	-	-	-	-	-	-0.27 (0.30)	3.94** (1.34)	5.08** (0.68)
Ideology	-	-	-	-	-	0.81** (0.25)	-0.52 (0.66)	-1.23** (0.42)
Valence	-	-	-	-	-	-	-2.00** (0.73)	-1.16** (0.51)
Position	-	-	-	-	-	-	-1.98** (0.81)	-1.93** (0.59)
McFadden's Pseudo- $R^2$		0.03	0.06		0.06	0.07		0.59
$N$		487	439		426	412		412

*Note:* Entries are multinomial regression coefficients, except in column 2 showing logistic regression coefficients and column 6 showing ordered logistic regression coefficients with standard errors in parentheses and intercepts not shown. For details about the variables and the scales, see the online appendix.

*Source:* BCCAP 2010 (Wave 5). \*\* $p \leq 0.01$ , \* $p \leq 0.05$ , one-tailed tests.

Fourthly, the valence dimension has traditionally held pride of place in the economic voting lexicon. It focuses on the performance of the macro-economy. But it has never been the only dimension investigated under the guise of economic voting. As noted, Kiewiet, author of the first book on economic voting theory, explicitly argued some time ago for the need for inclusion of an economic policy dimension, to tap what he called *policy-oriented* economic voting.<sup>70</sup> Kiewiet also heavily explored the role of pocketbook economic voting, but dismissed it because of its consistently weak findings.<sup>71</sup> Nevertheless, perhaps pocketbook (or egocentric) voting should be included here, as it does meet the criterion of a valence issue, i.e., there is a virtual consensus among individual voters that it is a ‘good thing’ for their personal financial well-being to improve. Furthermore, and more importantly, it could be argued that the reported influence from patrimony is a mere reflection of pocketbook voting. When a personal financial well-being measure was added to the specification, the risk assets effects we have reported could disappear as spurious. A direct test includes pocketbook retrospections in the simple SES voting models (Table 4, column 1 and Table 6, columns 1 and 2), in order to see what happens to the relationship between High-Risk asset (HRA) ownership and the vote. The results are clear-cut. The impact of adding these egocentric perceptions on the coefficient for the HRA variable is negligible; if anything, the effect of HRA appears a bit stronger after this inclusion.<sup>72</sup>

Fifthly, there is the concern that, even accepting the role of positional economic voting, attitudes on progressive taxation are a poor representative. To answer that concern, we examine the performance of other economic policy attitudes available in the dataset, namely unemployment policy and tax cuts. The first one is a ‘priority’ measure, with the respondent ranking ‘unemployment’ as their first, second, third or fourth priority.<sup>73</sup> The second item offers a ten-point scale on the question ‘Using the 0 to 10 scale below, where the 0 means that government should cut taxes a lot and spend much less on health and social services, and the end marked 10 means that the government should raise taxes a lot and spend much more on health and social services, where would you place YOURSELF on this scale?’ Both variables are included in the complete voting models (Table 4, column 5 and Table 6, columns 7 and 8). The results for the progressive tax item without these unemployment and tax-cutting items are as follows: Tory vote = 1.30 (0.47)\*\*; Labour vote = -1.98 (0.82)\*\*; Libdem = -1.93 (0.59)\*\*. The results for the progressive tax item with these unemployment and tax-cutting items are as follows: Tory vote = 1.21 (0.48)\*\*; Labour vote = -1.72 (0.82)\*\*; Libdem = -1.81 (0.60)\*\*. We observe several things. First, our progressive taxation item remains strong and significant in all cases. Moreover, the coefficients for that taxation item retain on average 91 per cent of their original magnitude. Secondly, the impact of including the two additional variables on the explained variance is hardly discernible with the pseudo (McFadden)  $R^2$  remaining at 0.56 and 0.59, respectively. Thirdly, the other possible positional variables have an

<sup>70</sup> Kiewiet, *Macroeconomics and Micropolitics*.

<sup>71</sup> Kiewiet, *Macroeconomics and Micropolitics*.

<sup>72</sup> Using the equations of Table 4, column 1 and the Table 6, columns 1 and 2, compare the HRA coefficient without and with the egocentric variables included, respectively: Tory vote = 1.00; Labour vote = -1.60; Libdem vote = -1.02 (all significant); Tory vote = 1.00; Labour vote = -1.70; Libdem Vote = -1.06 (all significant).

<sup>73</sup> Other possible priorities to select were inflation, trade or growth; a reverse coding is used to get a positive sign for the Tory model.



unstable pattern; the ‘unemployment’ variable is only close to being significant for the Tories ( $t = 1.62$ ); the opposite is true for the ‘cutting tax’ variable (being not significant at all for the Tories but significant for Labour and the Liberal Democrats). All in all, these results show that our progressive taxation item is powerful and preferred as a positional measure, performing as well in the British context as it did in the US demonstration.<sup>74</sup>

#### SUMMARY AND CONCLUSIONS

Studies relating economics to the individual voter, plentiful as they are, have all been of one type, focusing on economics as a valence issue. This perspective has great value. Clearly, the overwhelming evidence that voters punish or reward governments on the basis of economic performance represents a major contribution in the explanation of electoral behaviour. But, we argue, voters also rely on other aspects of the economy in making their choices. They assess central aspects of economic policy, and the positions they take there also shape their vote. Furthermore, the particular configuration of their wealth portfolio, which we label ‘patrimony’, makes a difference for their political preferences.

Taken together, the proposition is that the economic vote has multiple dimensions – valence, position and patrimony. Fortunately, the proposition is open to empirical testing and, while much has been done on the first dimension, little has been done on the second two. Here we explore a British election survey which, uniquely, allows us to examine all the dimensions within the confines of one study. We observe that each of the three dimensions exerts an independent influence on vote intention, even after the imposition of extensive statistical controls. Valence economics operates as expected. Those who saw the economy as worsening were more likely to punish the ruling Labour party, and to vote for the Tory opposition. But positional economic preferences are also at work. Where voters place themselves on the economic policy spectrum makes a difference for their vote. In particular, those less inclined to progressive taxation were clearly more likely to support the Tories. The economics of patrimony, through various routes, reaches the voters. Furthermore, it wields its influence in different ways from social class, as usually measured. Importantly, it is only the high-risk assets that matter. Holders of stocks or business assets want good financial reward for their risks, and so incline to the Tories and their more pro-market policies.

While this is only one study, it is the first of its kind in Britain. Besides, its results closely replicate those on multi-dimensional economic voting found in the United States. And, particularly with respect to the patrimonial dimension, it also supports work done in France. Still, the exploration of multi-dimensional economic voting is in its infancy. A battery of the essential economic items – on valence, position and patrimony – needs to be administered in surveys with a larger sample and more items, not to mention other countries. Moreover, issues of causal flow, from and among the economic variables, need to be addressed, and this really demands a panel design. Clearly, the work is just beginning. Nevertheless, the portrait of the ‘compleat economic voter’ is taking on sharper features.

<sup>74</sup> Lewis-Beck and Nadeau. ‘Obama and the Economy in 2008’.