

When the Pound in People’s Pocket Matters: How changes to personal financial circumstances affect party choice¹

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Abstract

In this paper we revisit the often disregarded ‘pocketbook voting’ thesis that suggests that people evaluate governments based on the state of their own finances. Using data from the British Household Panel Survey over the last 20 years, we measure changes in personal financial circumstances and show that the ‘pocketbook voting’ model works. Crucially, we also argue that the ability to attribute responsibility for these changes to the government matters. People respond much more strongly to changes in their own finances that are linked to government spending, such as welfare transfers, than to similar changes that are less clearly the responsibility of elected officials, such as lower personal earnings. We conclude that pocketbook voting is a real phenomenon, but that more attention should be paid to how people assign credit and blame for changes in their own economic circumstances.

Key words: Economic voting, pocketbook, party choice, responsibility, vote choice

¹ Supplementary online appendices are available at https://www.dropbox.com/s/hlg0ut5gmm8yiyf/Tilley%20et%20al_Pocketbook_SupplementaryMaterial_JOP.pdf?dl=0 and replication code is available in the JOP Data Archive on Dataverse. The data used in this article cannot be deposited online, but are freely available to registered users and can be requested via <https://discover.ukdataservice.ac.uk/catalogue/?sn=5151>.

In order to ascertain whether the incumbents have performed poorly or well, citizens need only calculate the changes in their own welfare.

(Fiorina 1981, 5)

Do voters' assessments of their changing financial circumstances shape their party support? The above quotation suggests that retrospective economic voting is fairly straightforward. If people think that they are personally worse off they should 'throw the rascals out', but if they feel better off they should re-elect the incumbent. This is referred to as 'pocketbook voting', where voters choose to punish or reward governments on the basis of changes in their personal economic circumstances. While the idea of pocketbook voting continues to dominate political discourse, there is surprisingly little empirical evidence to support it and the possible reasons that underlie this type of voting remain opaque. The consensus in the economic voting literature has long been that while voters do base their party support on retrospective economic evaluations, it is primarily their assessment of the nation's economic condition that matters, so-called sociotropic voting (see Kinder and Kiewiet 1979, 1981; Fiorina 1981; Lewis-Beck 1988; Lewis-Beck and Stegmaier 2000, 2007, 2013).

Yet, recent work has suggested that changes in individual financial circumstances can affect voting behavior in certain contexts. This evidence, based mainly on quasi-experimental methods, demonstrates that voters respond to specific government policies that affect their livelihoods and bank accounts, such as job training programs, childcare benefits, disaster relief efforts and other forms of targeted government policies, and adjust their political preferences accordingly (Bechtel and Hainmueller 2011; Elinder et al 2015; Healy and Malhotra 2010; Levitt and Snyder 1997; Margalit 2011; Pop-Eleches and Pop-Eleches 2012; Richter 2006; Shady 2000; Zucco Jr 2013). While it is compelling that economic self-interest

can matter to voters in some specific cases, this work does not provide a comprehensive test of the classic retrospective pocketbook model of voting. In this paper, we contribute to the study of economic voting by not only presenting an empirical reassessment of the pocketbook voting thesis using panel survey data, but also examining the underlying mechanisms of such voting. We argue that pocketbook voting is linked to how citizens attribute responsibility for any changes in their personal economic circumstances. Instead of assuming that voters hold the government equally responsible for all changes to their financial situation, we argue that changes that can be directly linked to government policies have a greater effect on support for the incumbent.

To rigorously test these propositions, we analyze data from the British Household Panel Survey. These data are particularly well-suited to test the pocketbook voting and attribution theses. By using repeated observations of the same people over a long time span which includes different incumbent governments, we aim to minimize difficulties associated with causal inference and endogeneity: the problem of whether vote choices cause economic perceptions rather than vice versa (Evans and Andersen 2006; Evans and Pickup 2010; Fraile and Lewis-Beck 2014; Lewis-Beck et al 2008; Tilley et al 2008). Our analysis demonstrates that voters' evaluations of changes in their personal finances do shift party support. When people think that they are personally worse off, they are a little less likely to support the governing party, and when they are personally better off, they are a little more likely to support the governing party. These results hold under a number of different model specifications, including cross-lagged models of perceptions and party support. Crucially, we also show that these effects depend on why people think their material conditions have changed. Changes that might be difficult to attribute to the government have much less effect than those that are easier to pin on the government. In particular, government welfare

transfers increasing or decreasing make a substantial difference to party choice, whereas changes to earnings are much less consequential. These findings have important implications for economic voting, and more broadly for our understanding of how voters hold governments to account. We suggest that voters take notice of government policies that affect them directly, and sanction incumbents accordingly.

Pocketbook voting and attribution of responsibility

The early economic voting literature focused on macro-economic change and how good economic performance strengthened support for incumbent parties. Most studies used aggregate data, including a variety of different ways of measuring ‘good’ economic performance including high growth, low unemployment or low inflation (see Kramer 1971; Tufte 1978; Mueller 1970). However, because of the country-level nature of these studies, it was difficult to disentangle the individual level reward-punishment mechanism of the model. In recent decades, most people have therefore used survey data with people’s views of economic change as an indicator of macro-economic performance (see Lewis-Beck and Stegmaier 2000, 2007 for overviews). A key question in this literature is whether economic voting is driven by personal experiences. Are voters motivated to change their party preferences by changes to their ‘pocketbook’? Despite the widespread assumption that voters evaluate incumbents, at least in part, on the basis of how government policies have affected their personal economic fortunes, it is not clear that pocketbook considerations matter. While some studies do find evidence of pocketbook voting (Nannestad and Paldam 1994, 1997; Alvarez and Saving 1997; Ansolabehere and Snyder 2006), most find zero or modest effects (Kinder and Kiewiet 1979; Feldman 1982; Lewis-Beck and Stegmaier 2000; Soss and Schram 2007). In their excellent reviews of a large number of published studies on economic

voting, Lewis-Beck and Stegmaier (2007, 2013) conclude that the empirical support for the pocketbook voting model is marginal at best.

This conclusion is in many ways surprising. While it is very persuasive that sociotropic evaluations are a crucial factor shaping vote choice, there are equally compelling reasons why pocketbook considerations might also matter. Much of the theoretical literature on strategic politicians assumes that incumbents can bolster their re-election chances by securing additional resources for their constituents and targeting public spending (Tuftes 1978; Dixit and Londegan 1996). There is also plenty of evidence to suggest that politicians use public budgets to try and keep constituents happy (Mayhew 1974; Shepsle and Weingast 1981; Lindbeck and Weibull 1987; Levitt and Snyder 1997), implying that politicians certainly believe that citizens vote with their pocketbooks (Dahlberg and Johansson 2002). This model of strategic politicians using public spending to win votes rests on the assumption that voters also behave in a self-interested manner: that voters reward incumbent politicians when they benefit from public transfers and punish them when public spending cuts affect them. In other words, vote choices are shaped not just by perceptions of the national economy, but also by people's perceptions of their own personal economic situation.

There is some work that has shown effects of pocketbook considerations in the very specific case of US Congressional elections (Alvarez and Saving 1997; Levitt and Snyder 1997, Ansolabehere and Snyder 2006). Another strand of more recent research has also identified substantial effects of specific changes in policy on the behavior and attitudes of those affected. Rather than analyzing responses to survey questions on changes in personal financial circumstances, most of this work uses quasi-experimental designs to investigate how actual policy change has influenced party preferences. Examples of where such policy

effects have been found include the Vietnam Draft Lottery in the US (Erikson and Stoker 2011), flood responses in Germany (Bechtel and Hainmueller 2011), investment in urban public transport in Spain (de la Calle and Orriols 2010), non-payment of wages in Russia (Richter 2006), targeted government spending to poor families in Romania (Pop-Eleches and Pop-Eleches 2012), conditional cash transfers in Brazil (Zucco Jr 2013), and budget cuts affecting parents with young children in Sweden (Elinder et al 2015).

Taken together, this more recent work suggests that voters do respond in a self-interested manner to specific policy changes that affect their financial circumstances, and this calls for a more general re-examination of the pocketbook voting model. The aim of this paper is thus to return to this model by examining whether perceptions of change in personal financial circumstances shape support for the incumbent, using high quality panel survey data in a more typical party-based parliamentary system. We focus on perceptions as it is people's feelings about changes to their finances, whether correct or not, that should drive party support. Pocketbook voting has to be about people's perceptions of improvement, or deterioration, to their personal finances and then the impact those perceptions have on vote choice. Specifically, we hypothesize that if people think that their own financial conditions have improved, they will reward the incumbent governing party. In contrast when people think that their own finances have deteriorated, they will be more likely to support the opposition. This leads to a restatement of the pocketbook voting hypothesis as below:

H1: People who think that their personal finances have improved are more likely to support the incumbent party than people who think their personal financial situation has deteriorated.

We go one step further than simply testing the classic pocketbook voting thesis to also examine the mechanisms that lead voters to punish or reward governments for changes in their personal economic circumstances. Importantly, we do not argue that *all* changes in personal finances are a useful heuristic for ascertaining how well the incumbent has performed, as Fiorina (1981) suggests in the opening quotation of this paper. Rather, we amend the basic model of pocketbook voting in one crucial way: we take into account the reason why people think their finances have changed. We argue that changes that are within the government's remit will be more important in deciding vote choices. It is less a case of macro-economic change driving party preferences via personal finances, but rather government policies shaping those party preferences via personal finances. The intermediary in both cases is the voter's personal financial situation, but the way in which governments shape those situations is quite different.

We argue that attribution of responsibility is thus a moderator of pocketbook voting. The importance of responsibility is already well-established in studies of sociotropic economic voting. In their seminal article, Powell and Whitten (1993) show that economic voting is conditioned by the 'clarity of responsibility' of political institutions. More specifically, they argue that complex institutional and governmental structures blur lines of responsibility and this blurring makes it more difficult for voters to assign responsibility and therefore sanction governments on the basis of their performance. In subsequent work, scholars have extended the original Powell and Whitten index and have moved towards a more dynamic understanding of how clarity of responsibility matters (Whitten and Palmer 1999; Anderson 2000; Nadeau et al. 2002; Duch and Stevenson 2008; Hobolt et al. 2013). The basic finding remains the same: if voters cannot say that the government is responsible for the outcome, they also cannot punish it for poor outcomes. However, while it is well-established that

attribution of responsibility is a key factor in sociotropic economic voting, this has been largely overlooked when it comes to people's personal finances.

Existing studies of pocketbook voting often rely on the (usually tacit) assumption that voters attribute all changes in their financial situation to the policies of the government (Kinder and Kiewiet 1979; Markus 1992; Nadeau and Lewis-Beck 2001). Equally for work that shows that voters adjust political preferences in response to specific policy events, such as disaster relief or a military draft, attribution of causal responsibility is fairly straightforward. Attributing responsibility for changes in household incomes is far from straightforward however. Incumbent governments have little control over people's day to day finances and citizens are likely to be aware of this (Gomez and Wilson 2001; Hellwig 2001; Marsh and Tilley 2010; Rudolph 2003; Tilley and Hobolt 2011; Hobolt and Tilley 2014). Moreover there are differences in the causes of changing personal incomes that will lead individuals to assign more or less responsibility to the government. Put simply, some changes are more directly linked to government policies than others. This seems to be most likely to be the case when it comes to increases or decreases in welfare transfers. After all these are payments from government agencies to individuals. We therefore hypothesize that voters will be more likely to support the government if they receive an increase in government transfers than if they earn more money because of a new job or promotion. In the former situation, voters may well link their increased spending power to actions of the government. In the latter situation, voters will, no doubt, see this as a result of their own hard work, ability or good fortune. Our second hypothesis is thus:

H2: The effect of changing personal finances on incumbent party support is greater when the causes of these changes can be more directly attributed to changes in government spending.

Methods and data

To test these hypotheses, we use the unique and under-explored British Household Panel Survey (BHPS). This ran from 1991 until 2008² and therefore encompasses a period of Conservative government (1991-1997) and a period of Labour government (1997-2008). The BHPS is an annual face-to-face panel survey of a representative sample of the British population with a questionnaire that is mainly focused on changes in household composition, labor market participation and other economic and sociological factors. Our dependent variable is party support. This is measured using three questions. The first asks whether respondents think of themselves as a ‘supporter of any one political party’, if they say no then they are asked whether they think of themselves as ‘a little closer to one political party than to the others’, and if they say no to that they are finally asked ‘if there were to be a General Election tomorrow, which political party do you think you would be most likely to support’.³ In essence, this is a measure of vote in years when there are no elections. It is widely used in the British case (Evans and Tilley 2012; Tilley 2015) and is highly correlated with vote choice in election years. For example, in 1997 we have people’s recalled vote in May and our measure of party support in the autumn. 92 per cent of people that voted Conservative in May 1997 said that they supported the Conservatives a few months later, the same comparison for Labour is 91 per cent and the Liberal Democrats 86 per cent. Given that the British electoral system generates some tactical voting, with slightly under 10 per cent of people voting

² After the 2008 wave the BHPS was discontinued although many of the participants formed part of a new ‘Understanding Society’ longitudinal survey. For more information on the BHPS (including the exact sampling strategy and level of panel attrition) see <https://www.iser.essex.ac.uk/bhps>.

³ For the 1992 wave, people were not asked a vote intention, but rather how they voted in the 1992 election. For people that did not answer the ‘supporter’ and ‘closer’ questions we used vote choice in 1992 to calculate party support.

tactically over the 1990s and 2000s (Fisher 2004; Fisher and Curtice 2006), this suggests that our measure of party support is essentially a measure of vote choice/ intention free of these tactical concerns.

In our analysis, we exclude Northern Ireland, which has a very different party system, as well as any respondents under 18 who are not eligible to vote in general elections. This leaves us with a sample of 9,354 people during the Conservative government (1991-1996 waves) and 17,183 respondents during the Labour government (1997-2008 waves). About 40 per cent of the people in the repeated sample are ‘supporters’ of a party, another 22 per cent are closer to a party and a further 15 per cent give a vote intention. Of our total repeated sample between 1991 and 2008, 23 per cent are Conservatives, 36 per cent Labour, 12 per cent Liberal Democrats, 7 per cent support other smaller parties and 23 per cent do not support a party. This distribution only changes slightly over time.⁴

Our two main independent variables are measures of changing personal financial circumstances. The first of these is a widely used question about perceptions of change over the last year (see Lewis-Beck and Stegmaier 2000, 2007). It is thus analogous to the standard sociotropic measure that asks about perceptions of how the general economic situation changed over the last year. As discussed earlier, by measuring perceptions of change we are measuring the most proximate factor to party choice. The exact wording of the perceptions question is: ‘Would you say that you yourself are better off or worse off financially than you were a year ago?’ Better off, worse off, about the same.’ 48 per cent of our total repeated sample reports no change in income, 27 per cent an increase and 24 per cent a decrease.

⁴ For the 1991-1996 period when the Conservatives were in government, Labour partisans make up 38 per cent of the panel, and this is only slightly lower at 35 per cent during the 1997-2008 period when Labour is in power.

Crucially, for anyone that said that they were better or worse off, this is followed by an open ended question that asks simply ‘why is that?’. The responses to this have been coded up into eight categories: increased earnings, increased government transfers, reduced expenses, other increases in income, decreased earnings, decreased government transfers, increased expenses, other decreases in income.⁵ We divide it up in this way because most people’s income is labor income or government transfer income. It is worth noting that in the UK, as in most other European welfare states, government cash payments are not simply targeted at the poor. A substantial proportion of the population receives some form of transfer from the government. For example, almost every family with children receives child benefit, for a family with two children this is almost £2,000 a year, and almost everyone over the age of 65 receives a state pension of at least £6,000 a year. On average between 1991 and 2008, 56 per cent of BHPS households received some form of cash benefit paid directly by the state.

Modeling pocketbook voting

Our goal is to test whether a respondent’s own financial experiences inform their party choice. For that, we rely on the structure of our data. The BHPS is a panel survey and interviews the same people year after year. We are thus able to model the dynamics of party

⁵ This represents a slightly reduced categorization from the original coding by the BHPS (the verbatim answers are not available). The main changes are twofold. First, we roll some of the smaller categories (investment income changes, one off windfalls or expenditure and ‘good management’) into the ‘other’ increases or decreases in income. Second, some people mentioned both positive and negative changes to their financial situation. For example, some people said that they were earning more, but they also faced more expenses. We have coded these people (less than 2 per cent of people that said their financial circumstances had changed) by the dominant change, so the person who is earning more but faces more expenditure and said that they were better off overall is counted as someone who has had a change due to increased earnings.

support given changes in personal finances. There are three parts to this. First, we need to account for serial correlation, as people's successive measures of party support are dependent on their previous party support. Second, we need to include changes in someone's financial situation in predicting party support. Finally, we need to take into account that when people enter the panel they differ in how likely they are to support a particular party, which relates to unit heterogeneity. We meet these three requirements by using a first-order Markov transitioning structure, where someone's party preference at time t is a function of their party preference at time $t-1$. Two recent articles by Clarke and McCutcheon (2009) and Neundorff et al (2011) demonstrate that Markov models are particularly good at specifying the dynamics of individual-level party support. As we have only a few waves of data and a categorical dependent variable, Markov models are preferable to a fixed effects (FE) model. The problem of modelling a categorical dependent variable (party support) with a FE model is that 'the FE estimator shows a large positive finite sample bias in discrete choice models when t is very small' (Greene 2004: 144). Equally 'dynamic models of preferences should include a persistence parameter capturing this correlation' (Stegmueller 2013: 316). FE logistic models cannot account for this state dependence in the data, as standard FE estimation strategies are unavailable due to the presence of a lagged dependent (endogenous) variable in the nonlinear model (Nickell 1981; Heckman 1981; Arellano and Carrasco 2003). We nonetheless present the results of fixed effect models in Table 5 in the robustness section and the results are consistent with our findings.

In terms of specification, if i indexes individuals ($i = 1, \dots, I$) observed in BHPS survey wave t ($t = 1, \dots, T$), then a Markov model is specified as:⁶

⁶ The models were estimated using the LatentGOLD 5.1 (Vermunt and Magidson 2013).

$$\log\left(\frac{P(PS_{it} = r | PS_{it} = s)}{P(PS_{it} = s | PS_{it} = s)}\right) = \beta_{0rs} + \beta_{1rst} PS_{i,t-1} \quad (1)$$

Model (1) specifies the categorical level variable measuring party support PS_{it} , to be a function of the previously held party loyalty $PS_{i,t-1}$. The model's transition dynamics are parametrized by a series of logit equations modeling the probability of supporting party r instead of party s as a function of the overall intercepts and the lagged party support effects that are captured by β_{1rst} . The advantage of this model over other techniques is the use of a categorical dependent variable. The model's transition dynamics are parametrized by a time-heterogeneous Markov transition structure, allowing transition probabilities in and out of party support to differ between surveys. This captures overall time effects such as the changing nature of party fortunes due to leadership changes, political scandals and so forth.

Once we have determined the dynamics of individuals' party support we can introduce the covariate x_{it} that measures changes in a respondent's personal finances. Model 2 introduces the coefficients β_{2rs} that measure the impact of people's subjective finances on the probability of someone updating their support for any of the parties at time t :⁷

$$\log\left(\frac{P(PS_{it} = r | PS_{it} = s)}{P(PS_{it} = s | PS_{it} = s)}\right) = \beta_{0rs} + \beta_{1rst} PS_{i,t-1} + \beta_{2rs} x_{it} \quad (2)$$

The model above models the dynamics of party support and how changes in a respondent's finances affect this dynamic. People clearly differ in their probability to support one or another party (or none at all) in the first place. It is therefore important to account for

⁷ For this to be effective, we need people to be in multiple waves of the data. This means that we have excluded respondents that only answered questions in one or two waves. A minimum of three responses, gives us at least two transitions per person. For the 1991-1997 period, this excludes about 10 per cent of respondents, and for the 1998-2008 period about 5 per cent of respondents.

variables that predict party support, and model 3 controls for a range of social characteristics (K) at the point at which people first entered the panel ($t=0$):

$$\log\left(\frac{P(PS_{i0} = r | PS_{i0} = s)}{P(PS_{i0} = s | PS_{i0} = s)}\right) = \alpha_{ors} + \sum_{k=1}^K \alpha_k w_{i0k} \quad (3)$$

These variables are well-known demographic predictors of party support in the British context: occupational social class, age, employment status, region, income, sector of employment, education, housing tenure and gender.⁸

Results

Do changes in people's household finances affect their support for governing and opposition parties? To answer this question we divide the panel into two periods: the 1991-1996 period when the Conservatives are in government and Labour, along with all other parties, is in opposition; and the 1997-2008 period during which Labour is in government and the Conservatives, and all other parties, are in opposition.⁹

TABLE 1 ABOUT HERE

Table 1 reports the main effects of personal finances on the transition probabilities of changing party support over these two periods expressed in Model 2. Specifically we show

⁸ The coefficients for these control variables are reported in Appendix 2. The impact of the control variables is much as we would expect. Older, richer people in private sector middle class occupations who own their own house are more likely to support the Conservatives, and the opposite for Labour supporters. The inclusion of these variables makes little difference to the key results concerning economic perceptions.

⁹ As the BHPS fieldwork is carried out in the autumn and the 1997 general election was held on the 1st of May, we use the 1997 data to provide a starting point for people in the second period.

the coefficients predicting the transition probability of someone updating their party support between time $t-1$ and t , depending on whether their subjective financial situation got better, got worse or stayed the same. We use effect coding rather than dummy coding, which allows us to compare the effect of all three options rather than using one as a reference category. Table 1 thus shows how likely it is that someone will switch towards, or away from, each of the parties given their reports of how their finances have changed over the last year. A positive number means that people switch towards that party, a negative number that they switch away. Turning to the Conservative government period first in Table 1, what we see is that the pound in people's pocket does matter. Positive changes in household finances lead to positive switches towards the incumbent governing party, and switches away from the main opposition party Labour. Negative changes to household finances lead to people switching away from the Conservatives and towards Labour. There is a similar pattern for the period of Labour government. When people feel better off they switch away from the Conservatives and towards Labour, when people feel worse off people switch towards the Conservatives and away from the Labour government. No matter the color of the government, when individuals' household finances improve they reward the governing party and punish the opposition, when their household finances deteriorate they punish the governing party and reward the opposition. These findings provide support for our first hypothesis.

These are important results, as they clearly show that individuals' party choices are affected by their changing personal financial circumstances. These effects hold for government and opposition parties and are apparent during periods of different party rule. To illustrate the magnitude of these pocketbook considerations, Table 2 shows how the predicted probabilities of support for the Conservatives and Labour would change for people with different party choices and facing different financial circumstances. For the period of Conservative party

rule, individuals who previously supported the Conservatives are more likely to defect if they see their household finances deteriorating than people who see things improving: 80 per cent of the former group remain loyal to the Conservatives compared to 83 per cent of the latter group who felt better off. Equally people who supported other parties are more likely to start supporting the Conservatives if they think things are getting better compared to those who think things are getting worse. For example, in any year during Conservative incumbency, 13 per cent of people with no party support in the previous wave with a worsening financial situation became Conservative supporters compared to 15 per cent of people with an improved financial situation who previously did not support a party. The opposite pattern holds under the Labour governments. Previous Conservative supporters are more likely to stick with the party when they think things are getting worse, and similarly the Conservatives are more likely to pick up supporters who think their financial situation has worsened. The right panel of Table 2 tells the same story for Labour support. Labour supporters were more loyal and people were more likely to switch to Labour when their finances got worse under the Conservatives or got better under Labour.

TABLE 2 ABOUT HERE

At first glance, these effects may appear small. The differences between people who felt worse and better off are a few percentage points at most. But this is not surprising. Aggregate party support changes little from year to year, just as most people do not change their party support from one year to another. Appendix 1 shows the high stability of party support. Any differences due to changing financial circumstances appear small when measured from one year to the next because very few people, around 20 per cent, switch party from one year to the next. What matters is how those small differences mount up and how they potentially

explain changes in the electoral strength of parties. Given how few people switch, pocketbook considerations are clearly a non-trivial predictor of movements between parties.

Hence, contrary to much of the extant literature, our findings lend some support to the pocketbook voting thesis: people do change their party preferences based on their own financial circumstances. The question remains of the mechanism that leads voters to switch parties due to changes in personal finances. Our argument is that attribution of responsibility is a crucial part of the sanctioning process. Voters distinguish between changes that are outside the government's control and changes that the government could plausibly be responsible for, and primarily switch party support on the basis of the latter (Hypothesis 2). We test this proposition by examining the reasons that people give for the improvement or worsening of their finances. Table 3 shows a similar model to the ones previously discussed except we break down changing financial circumstances by the reasons that people gave for that change. Again the coefficients here represent the effects of different kinds of financial changes on the predicted probability of someone updating their party support.

TABLE 3 ABOUT HERE

We observe the same patterns in terms of broadly negative coefficients associated with the governing party when people thought things had got worse and positive coefficients when people thought things had got better, but in line with our expectations there is also clear variation in the size of those coefficients depending on why people thought things had got worse or better. During the period of Conservative rule in the 1990s the biggest negative effect by far on Conservative support is for people who thought that their finances worsened due to decreased welfare payments and the biggest positive effect is for people who thought

that their finances improved due to increased welfare payments. Other changes also mattered, earning more or less money affected people's support for the Conservatives as well, but it is benefit changes that matter the most.

There is a similar story for the Labour period of government. Labour gets more support from people whose government transfers increased and less support from those with reduced payments. The former is by far the biggest positive effect on Labour support and the latter is the second biggest negative effect. These results strongly suggest that pocketbook voting is linked to attribution of government responsibility. Changes in earnings and expenses are, for most people, far removed from government activities, whereas welfare transfers are paid by the government. Compare the myriad of reasons why I might earn more money this year than last year with the reality of receiving more or less money paid directly into my bank account by a government agency. The latter is something that can be very easily blamed on, or credited to, the governing party. There are other differences by people's cited reason for change that we could give post hoc explanations for. Changes in earnings seem to matter for the Conservatives when they are in government during an economic recession, but not for Labour when they are in government during an economic boom. But disentangling whether this is due to the party in charge, or the economic conditions of the day is not possible. Indeed the variation in how different changes matter only highlights the much larger and more consistent effect of government transfer changes compared to everything else.

FIGURE 1 ABOUT HERE

Figure 1 shows our predictions of how benefit changes affect government support for people who already support the governing party. In effect, this is the degree of loyalty that people

have to the governing party if they already support it. For the 1991-1996 period, we would predict that 73 per cent of people that supported the Conservatives last year and saw their transfers decrease would support the Conservatives this year. For similar people who saw their transfers increase over 84 per cent would support the Conservatives. Exactly the same pattern can be seen for Labour after 1997. People are substantially more loyal to governing parties, regardless of their ideological stance, if they think that they are better off due to higher transfers than if they think they are worse off due to lower transfers.

FIGURE 2 ABOUT HERE

Equally, defection rates to governing parties are much greater when people see their welfare benefits increase than when they see their welfare benefits decrease. Figure 2 shows how these defection rates vary. Defecting to the incumbent party is of course dependent on previous party support and general changes towards the governing party. There are few direct movements between Labour and the Conservatives for either period, but quite substantial amounts of defection to the governing party from people who supported no party and to a lesser extent the Liberal Democrats. More importantly we see the large differences between people who said their transfers increased compared to those whose transfers decreased. Fewer people moved to the governing party (whether Labour or Conservative) if they were worse off due to changes to their transfers than did people who were better off. Overall the rates of defection to incumbent parties for gainers from government transfer changes are almost double those for losers of transfer changes.

Finally, it is worth reflecting on the question of whether the inclusion of changes in perceptions of personal finances produces a better fitting model of party support change.

Table 4 reports the Log-Likelihood ratio test for Model 1 (personal financial change included as in Table 1) and Model 2 (reason for financial change included as in Table 2) to Model 0 (which only includes lagged party support and control variables at $t=0$), and the answer to that question is yes. Including changes in financial circumstances, as well as the more nuanced measure of reasons for those changes, significantly improves model fit.

TABLE 4 ABOUT HERE

Robustness checks

In this section, we test the robustness of our main finding to address possible concerns about a) the endogeneity and causal structure; b) the use of alternative estimation techniques; c) the inclusion of macro-economic evaluations; d) the conditional effects of political interest; e) the operationalization of the dependent variable; and f) the use of party support rather than vote.

Endogeneity and causal structure

One obvious issue with our results is the possible endogeneity of personal finance evaluations, which might themselves be driven by party support. We have attempted to test for this possibility by estimating cross-lagged models, in which we simultaneously model the dynamics of party support and subjective financial evaluations (Evans and Andersen 2006; Evans and Pickup 2010; Dancey and Goren 2010; Milazzo et al. 2012). The results are reported in Appendix 4. Cross-lagged models estimate the effect of previous party support on reported financial change and vice versa. In summary, we find that personal financial evaluations are partly a product of previous party support: individuals who support the opposition party are more likely to feel they are worse off. Overall, the cross-lagged effects of party support on personal financial situations are relatively small however, and the effects

of lagged personal finances on party support remain largely consistent. Accounting as best we can for possible endogeneity, the pocketbook voting hypothesis appears to hold.

Estimation

As outlined in the earlier discussion, using fixed effect models is not ideal since we have a categorical dependent variable and data with many cases, but few waves. Nonetheless, we also ran standard fixed effects models that predict support for the incumbent party versus any other party, or no party, for our two government periods. These models are shown in table 5 below. Despite using a more conservative estimation procedure, the results confirm the general pocketbook voting hypothesis. Changes in benefits also push people towards or away from the governing party, although we should note that in the period of the Conservative government the coefficients, while large in magnitude, are not statistically significant.

TABLE 5 ABOUT HERE

Macro-economic evaluation and pocketbook voting

Unfortunately, our survey data does not include the standard item used to measure ‘sociotropic’ economic voting, which has been shown in the literature to be more important than pocketbook considerations (Lewis-Beck and Stegmaier 2007). As a consequence, we are not able to compare the strength of sociotropic and pocketbook considerations. However, we can show that pocketbook considerations matter when controlling for some types of national economic perceptions. The 1992, 1994 and 1996 surveys include two items that asked whether respondents were concerned about rates of inflation and unemployment in Britain. We added these two items alongside people’s retrospective financial evaluations. As expected, those concerned with unemployment and inflation tend to punish the government

and defect from the Conservatives. These effects have a similar magnitude to the effect of changing welfare transfers. Most importantly for this paper, the effects of pocketbook voting remain statistically significant and in the same direction even when including these sociotropic economic indicators. Comparing the fit of the different nested models shows that including personal financial changes significantly improves the model even if we take into account national economic evaluations. These results are reported in Appendix 5.

Conditional effects of political interest

Gomez and Wilson (2001, 2006; although see Godbout and Belanger 2007 and Gomez and Wilson's (2007) reply) acknowledge the problem of diffuse attribution of responsibility in traditional tests of pocketbook voting and focus on how political sophistication is a key moderating factor in how citizens relate changes to their welfare to vote choices. In their theory of heterogeneous attribution, Gomez and Wilson argue that politically unsophisticated individuals will tend to focus on single, obvious causes for events or conditions, e.g. the president or indeed themselves. As reported in Appendix 6, we find only weak support for this idea. Although politically uninterested people (our best measure of political sophistication is political interest) have slightly weaker patterns of economic voting than the politically interested on average, we find no consistent pattern to egocentric economic voting by political interest, at least in Britain over the time period covered by the BHPS.

Operationalization of party support

We also tested whether an alternative measure of party support makes a difference to our results. In the main tables, party support is measured using three questions. The first asks whether respondents think of themselves as a 'supporter of any one political party', if they say no then they are asked whether they think of themselves as 'a little closer to one political

party than to the others’, and if they say no to that they are finally asked ‘if there were to be a General Election tomorrow, which political party do you think you would be most likely to support’. In our alternative operationalization, we just use the first two questions and count people who were unwilling to say that they ‘supported’ or ‘were closer’ to a party as supporters of no party. This measure should mean that party supporters have a stronger bond to their preferred party. Using this more conservative measure does not alter our results; pocketbook voting appears to be just as strong. These results are in Appendix 7.

Using vote choice instead of party support as the dependent variable

Many studies of economic voting use vote choice as their dependent variable. As discussed, this is not possible for data that track people’s preferences from year to year. We were able to re-run our models using vote choice for the Labour governing period, which covers three general elections: 1997, 2001 and 2005. Appendix 8 reports the results of this analysis. The results largely confirm our main results in that people who were better off are less likely to vote for the Conservatives and those that were worse off tend to stop voting for Labour and instead become Conservative voters. Equally people who saw their benefits increase are more likely to vote Labour over those three elections.

Conclusion

The empirical puzzle addressed in this paper is that while there is a widespread belief that governments can increase their electoral support through targeted public spending, there is far less evidence to show that party support is shaped by personal financial circumstances. Although there are numerous studies that show that citizens take into account changes in the national economy more broadly, the evidence that economic voting is rooted in personal experience is far more mixed. Nonetheless recent work examining specific government

policies suggests that voters who are materially affected by such policies do change their party support accordingly (Elinder et al 2015; Pop-Eleches and Pop-Eleches 2012; Richter 2006; Shady 2000). Building on such findings, this paper has presented a more general reassessment of the classic pocketbook voting thesis, using panel survey data that captures how perceptions of changing personal finances feed into changes in party support. In contrast to much of the existing work using survey data to examine economic voting, we find pocketbook voting: people are more likely to switch party preference when they think that their own personal finances have changed.

This is important as it sheds light on what drives changing patterns of party support and also lends credence to the assumptions underlying much of the work on strategic politicians (Mayhew 1974; Shepsle and Weingast 1981; Lindbeck and Weibull 1987; Levitt and Snyder 1997). It suggests that voters do act in a self-interested manner and respond to changes in their personal finances by sanctioning governments. However, the overall impact of pocketbook voting on election outcomes should not be exaggerated. The effects are not huge. Moreover, during stable economic times it is relatively rare that there are substantially more people thinking they are worse off than better off, or vice versa. The biggest differences in our dataset are found in 2001 and 2008. In 2001, at the height of the economic boom, 31 per cent of people said that they had improving personal finances compared to 20 per cent with deteriorating finances. In 2008, as the boom turned to bust, these percentages were reversed with 36 per cent of people thinking things had got worse for them and 20 per cent saying things had got better. Perceptions of people's own financial situation do track the wider economy, but not that closely. This means that while people in a worse financial position are less likely to stay loyal to the government party and more likely to move to the opposition party, much of that depressive effect on the government vote will be cancelled out by people

in a better financial position staying loyal, or moving, to the government. This means that although personal finances may help to explain how individuals change their party preferences, they are inevitably less good at explaining aggregate change in the electorate.

Importantly, our paper goes beyond the classic pocketbook model to explore when and why voters sanction governments for changes to their personal finances. As our second hypothesis surmised, personal finances appear to have a greater impact when they can be more easily linked to the actions of the state. Just as perceptions of the wider economy matter more when it is clear that the government was responsible for changes to the general economic situation, changes to an individual's economic situation matter more when they appear more closely linked to government action. This means that much of the change that we see in party preferences cannot really be accounted for by higher growth rates leading to higher wages, or deflation leading to reduced expenses. Rather we find the most important driver of personal economic performance voting is actually change that can be attributed directly to government policies, such as welfare payments and other government transfers. These findings are thus aligned with the recent literature on how voters respond to specific government policies that affect their material self-interest, such as flood relief (Bechtel and Hainmueller 2011), targeted government transfers to poor families (Pop-Eleches and Pop-Eleches 2012) or childcare payments (Elinder et al 2015).

We therefore help to explain when personal financial self-interest matters. Voters do not appear to ask themselves the simple question of whether they are better off than they were last year when forming their party preferences. Instead they may switch party allegiance if they think that any changes to their financial circumstances are directly due to the government. These findings help explain why previous studies have found mixed evidence of

pocketbook voting. They also have broader normative implications for our understanding of how voters hold government to account. It is well-established that voters sanction governments on the basis of their perceptions of general economic performance, but our findings suggest that targeted government spending that benefits specific individuals may also sway affected voters, and conversely that voters will punish governments for policy reforms that adversely affect them. This suggests that there is pocketbook voting, but mainly when the name on the check is the government of the day.

Acknowledgements

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Tables and Figures

TABLE 1: Predicting transition probabilities of party support at t by financial change

CONSERVATIVE GOVERNMENT (1991-1996)								
DV: Party support (at t)	Conservative		Labour		Liberals		None	
	<i>Coef.</i>	<i>s.e.</i>	<i>Coef.</i>	<i>s.e.</i>	<i>Coef.</i>	<i>s.e.</i>	<i>Coef.</i>	<i>s.e.</i>
<i>Change in Finances:</i>								
Worse off	-0.11*	0.02	0.04*	0.02	0.04	0.02	0.00	0.02
Stayed the same	0.05*	0.02	0.01	0.02	-0.02	0.02	0.05*	0.02
Better off	0.05*	0.02	-0.05*	0.02	-0.02	0.03	-0.04*	0.02
LABOUR GOVERNMENT (1997-2008)								
DV: Party support (at t)	Conservative		Labour		Liberals		None	
	<i>Coef.</i>	<i>s.e.</i>	<i>Coef.</i>	<i>s.e.</i>	<i>Coef.</i>	<i>s.e.</i>	<i>Coef.</i>	<i>s.e.</i>
<i>Change in Finances:</i>								
Worse off	0.05*	0.01	-0.07*	0.01	0.00	0.02	-0.02*	0.01
Stayed the same	0.00	0.01	0.05*	0.01	-0.01	0.01	0.01	0.01
Better off	-0.04*	0.01	0.02	0.01	0.01	0.01	0.01	0.01

Note: * $p < 0.05$. The results are based on a Markov-chain model predicting the transition probability to change party support from one panel wave to the next. Additionally to the coefficients reported here, the model estimated coefficients β_{1rst} which capture the effects of being a supporter of a party r at $t-1$ on the probability of remaining loyal to that party or switching to party s . These coefficients are allowed to vary over time and are available upon request from the authors. Control variables measuring age-group, housing tenure, region, education, income, occupational social class and sector of work are included in the models at the first time point, but are not shown here (see Appendix 2). Other minor parties are included in the models, but not shown here (see Appendix 3).

Data: BHPS 1991-2008. Number of respondents: 1991-1996 9,354; 1997-2008 17,183.

TABLE 2: Predicted proportion of people supporting the Conservatives and Labour given their previous financial circumstances and previous party support (including 95 per cent confidence intervals in grey)

		CONSERVATIVE GOVERNMENT (1991-1996)					
		Conservative support (at t)			Labour support (at t)		
Financial change		Worse off	Better off	Δ	Worse off	Better off	Δ
Party support (at t-1)	Conservative	80.0%	83.3%	-3.3%	4.6%	3.7%	0.9%
		[79.4; 80.6]	[82.7; 83.9]		[4.3; 4.8]	[3.5; 3.9]	
	Labour	1.8%	2.2%	-0.4%	87.6%	86.5%	1.1%
		[1.6; 1.9]	[2.0; 2.3]		[87.2; 88.0]	[86.0; 87.0]	
	Liberal	6.3%	7.1%	-0.8%	15.7%	15.4%	0.3%
		[5.8; 6.6]	[6.6; 7.6]		[15.0; 16.4]	[14.7; 17.2]	
	None	12.5%	14.5%	-2.0%	17.8%	16.6%	1.1%
		[11.8; 13.0]	[13.8; 15.1]		[17.1; 18.5]	[15.9; 17.4]	
		LABOUR GOVERNMENT (1997-2008)					
		Conservative support (at t)			Labour support (at t)		
Financial change		Worse off	Better off	Δ	Worse off	Better off	Δ
Party support (at t-1)	Conservative	83.9%	82.0%	1.9%	2.9%	3.5%	-0.6%
		[83.3; 84.4]	[81.4; 82.6]		[2.7; 3.1]	[3.3; 3.7]	
	Labour	2.8%	2.6%	0.3%	78.3%	79.2%	-0.9%
		[2.7; 3.0]	[2.4; 2.7]		[77.8; 78.8]	[78.8; 79.6]	
	Liberal	6.5%	6.0%	0.5%	9.1%	9.7%	-0.6%
		[6.1; 6.9]	[5.6; 6.4]		[8.6; 9.6]	[9.2; 10.2]	
	None	9.6%	8.6%	0.9%	11.9%	12.7%	-0.8%
		[9.2; 10.0]	[8.3; 9.0]		[11.4; 12.3]	[12.3; 13.1]	

Note: The estimates are based on the results presented in Table 1. Statistically significant differences at the 5 per cent level are highlighted in bold.

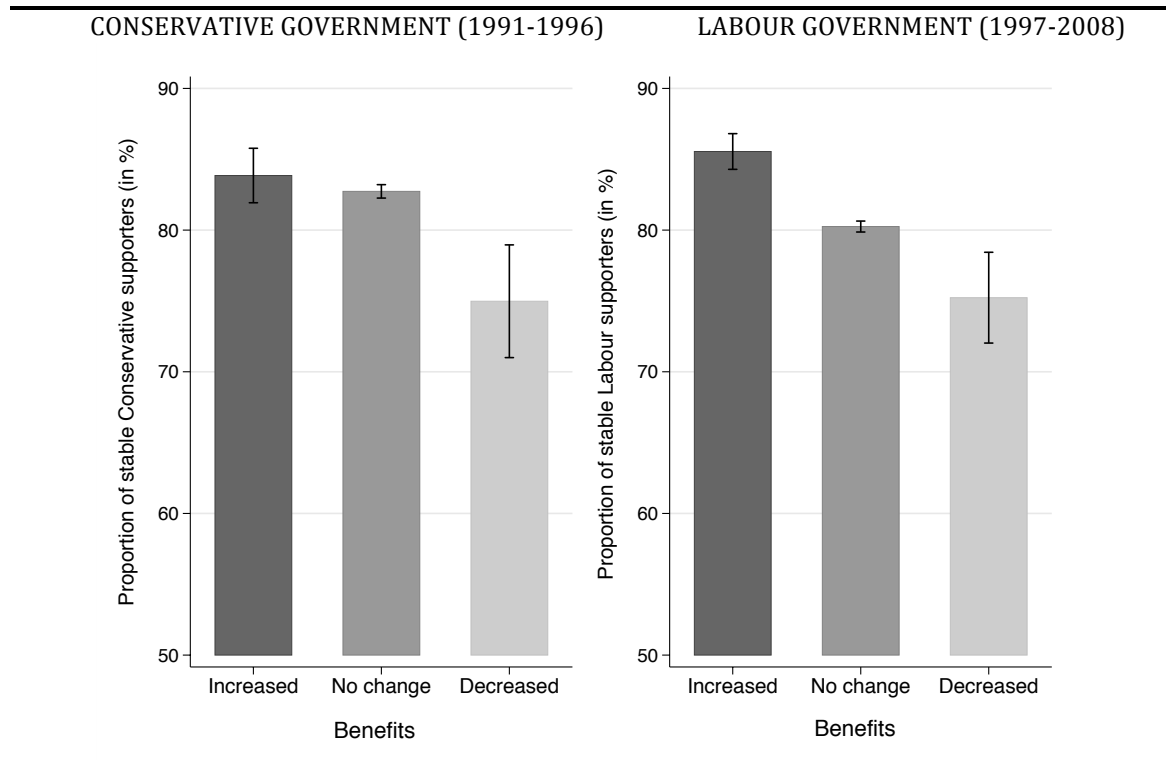
TABLE 3: Predicting transition probabilities of party support at t by reasons for financial change

		CONSERVATIVE GOVERNMENT (1991-1996)							
DV: Party support (at t)	Conservatives		Labour		Liberals		None		
	<i>coef.</i>	<i>s.e.</i>	<i>coef.</i>	<i>s.e.</i>	<i>coef.</i>	<i>s.e.</i>	<i>coef.</i>	<i>s.e.</i>	
<i>Change in Finances:</i>									
Increased earnings	0.11*	0.05	-0.06	0.04	-0.14*	0.05	0.03	0.04	
Increased benefits	0.23*	0.12	0.06	0.11	0.06	0.12	-0.16	0.12	
Reduced expenses	0.02	0.09	-0.04	0.08	0.04	0.09	0.05	0.08	
Other increase	0.18*	0.07	-0.16*	0.07	-0.20*	0.08	-0.01	0.07	
Same/No change	0.09*	0.03	0.00	0.03	-0.06	0.03	0.09*	0.03	
Decreased earnings	-0.18*	0.06	0.01	0.05	-0.02	0.06	0.09	0.05	
Decreased benefits	-0.37*	0.15	0.12	0.12	0.23	0.14	-0.19	0.13	
More expenses	-0.08	0.05	0.09*	0.04	0.04	0.05	0.08	0.05	
Other decrease	-0.01	0.07	-0.02	0.06	0.07	0.07	0.02	0.06	
		LABOUR GOVERNMENT (1997-2008)							
DV: Party support (at t)	Conservatives		Labour		Liberals		None		
	<i>coef.</i>	<i>s.e.</i>	<i>coef.</i>	<i>s.e.</i>	<i>coef.</i>	<i>s.e.</i>	<i>coef.</i>	<i>s.e.</i>	
<i>Change in Finances:</i>									
Increased earnings	-0.06*	0.03	-0.01	0.02	0.03	0.03	0.07*	0.02	
Increased benefits	0.06	0.06	0.35*	0.05	0.01	0.06	-0.22*	0.05	
Reduced expenses	-0.05	0.05	0.00	0.04	0.07	0.05	0.04	0.03	
Other increase	0.03	0.04	-0.03	0.03	0.03	0.04	-0.03	0.03	
Same/No change	0.00	0.02	0.06*	0.02	0.01	0.02	0.01	0.01	
Decreased earnings	-0.01	0.04	-0.02	0.03	0.02	0.04	0.04	0.03	
Decreased benefits	-0.16	0.11	-0.13	0.08	-0.23*	0.11	0.22*	0.07	
More expenses	0.06*	0.03	-0.05*	0.02	0.04	0.03	-0.08*	0.02	
Other decrease	0.14*	0.04	-0.15*	0.04	0.02	0.05	-0.05	0.03	

Note: * $p < 0.05$. The results are based on a Markov-Chain model predicting the transition probability to change party support from one panel wave to the next. Additionally to the coefficients reported here, the model estimated coefficients β_{1rst} which capture the effects of being a supporter of a party r at $t-1$ on the probability of remaining loyal to that party or switching to party s . These coefficients are allowed to vary over time and are available upon request from the authors. Control variables measuring age-group, housing tenure, region, education, income, occupational social class and sector of work are included in the models at the first time point, but are not shown here (see Appendix 2). Other minor parties are included in the models, but not shown here (see Appendix 3).

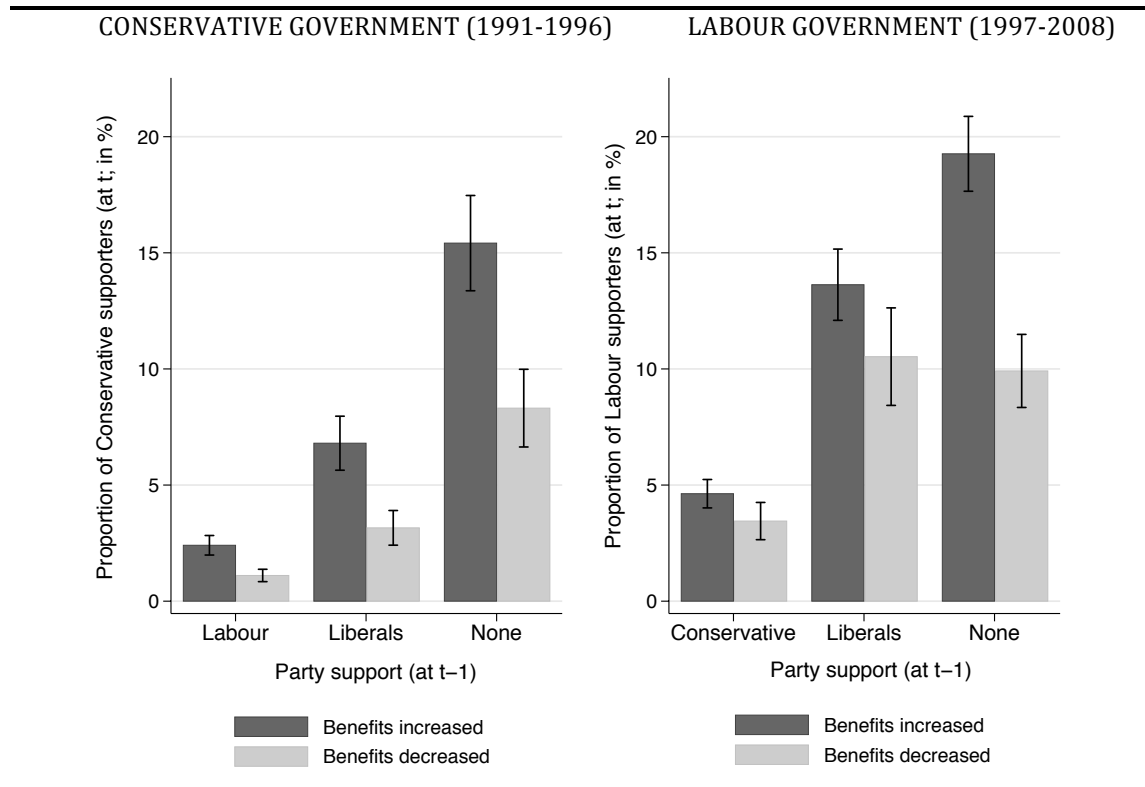
Data: BHPS 1991-2008. Number of respondents: 1991-1996 9,354; 1997-2008 17,183.

FIGURE 1: Predicted proportion of people staying loyal to the governing party given their changing benefit levels (incl. 95% C.I.)



Note: Predicted probabilities calculated from Table 3. Bars show 95 per cent confidence intervals.

FIGURE 2: Predicted proportion of people defecting to the governing party given their changing benefit levels and previous party support (incl. 95% C.I.)



Note: Predicted probabilities calculated from Table 3. Bars show 95 per cent confidence intervals.

TABLE 4: Model fit

CONSERVATIVE GOVERNMENT (1991-1996)				
	Log Likelihood	LR	df	sig
M0: Only control variables at t=0	-41,078			
M1: Incl. financial change (Table 1)	-41,060	36	8	0.001
M2: Incl. reasons for financial change (Table 2)	-41,037	82	16	0.001
LABOUR GOVERNMENT (1997-2008)				
	Log Likelihood	LR	df	sig
M0: Only control variables at t=0	-124,851			
M1: Incl. financial change (Table 1)	-124,824	54	8	0.001
M2: Incl. reasons for financial change (Table 2)	-124,755	192	16	0.001

TABLE 5: Fixed effects logit regression model predicting government party support versus opposition or no party support

	Conservative government support (1991-1996)		Labour government support (1997-2008)	
	<i>coef.</i>	<i>se</i>	<i>coef.</i>	<i>se</i>
<i>Financial change (Ref: Got better)</i>				
Worse off	-0.24 *	0.06	-0.17 *	0.03
Same	-0.13 *	0.06	-0.12 *	0.03
Control variables	Age, income, sector, class, employment			
N of cases	2,358		6,920	
N of average obs.	5.3		8.5	
<i>Financial change reasons (Ref: Same/no change)</i>				
Increased earnings	0.12	0.09	0.10 *	0.03
Increased benefits	0.32	0.24	0.28 *	0.08
Reduced expenses	-0.08	0.15	0.06	0.06
Other increase	0.07	0.13	0.11 *	0.05
Decreased earnings	-0.27 *	0.11	0.03	0.05
Decreased benefits	-0.53	0.37	-0.08	0.12
More expenses	-0.27 *	0.10	-0.08 *	0.04
Other decrease	-0.52 *	0.13	-0.04	0.06
Control variables	Age, income, sector, class, employment			
N of cases	1,897		6,819	
N of average obs.	4.5		8.4	

Note: * $p < 0.05$. The dependent variable here measures support for the incumbent party versus any other party or no party.

Data: BHPS 1991-2008.