

# **When the pound in people's pocket matters: A test of how people's financial circumstances affect their party preferences**

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## **Abstract**

Studies of economic voting have repeatedly found that voters evaluate governments on the basis of national economic conditions rather than the state of their personal finances. In this paper we revisit the 'pocketbook voting' thesis that suggests that people evaluate governments on the latter criterion. Using data from the British Household Panel Survey over the last 20 years, we measure changes in personal financial circumstances and show that the basic model of 'pocketbook voting' does work in Britain. Moreover, we demonstrate that the ability to attribute the responsibility for changes to the government matters. People respond much more strongly to changes in their *own* finances linked to government spending, such as welfare benefits, than to similar changes that are less clearly the responsibility of elected officials, such as lower personal earnings. We conclude that pocketbook voting should not be discarded, but more attention should be paid to how individuals assign credit and blame for the changes in their economic circumstances.

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*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 quote suggests that retrospective economic voting is fairly straightforward. If people feel that they are personally worse off than before they should "throw the rascals out" and if they feel better off, they should re-elect the incumbent. This is, in the jargon, "pocketbook voting", where voters choose to punish, or reward, governments on the basis of changes in their personal economic circumstances. While the notion of pocketbook voting continues to dominate political discourse, there is surprisingly little empirical evidence to support it. Instead 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 Kiewit 1979, 1981, Fiorina 1981, Kinder et al 1989; Lewis-Beck and Stegmaier 2007). These "sociotropic assessments have little to do with personal experiences" (Kinder et al 1989: 512).<sup>1</sup>

This consensus has been challenged more recently with some suggesting that that material self-interest can affect voting behaviour. 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 programmes, childcare benefits, disaster

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<sup>1</sup> Some recent work suggests that in the case of turnout pocketbook and sociotropic considerations may be inherently linked in that people use the state of the overall economy as a reference-point for their own personal economic situation (Killian et al 2008).

relief efforts and even military drafts, and adjust their political preferences and electoral behaviour accordingly (Bechtel and Hainmueller 2011; Elinder, Jordahl and Poutvaara, 2015; Erikson and Stoker 2011; Healy and Malhotra 2010; Margalit 2011; Richter, 2006). While these studies present compelling evidence that economic self-interest can matter to voters in some specific cases, they do not provide a comprehensive test of the classic retrospective pocketbook model of voting, focused as they are on very specific policy changes.

In this paper, we contribute to the revival of interest in personal economic voting by re-examining the pocketbook voting model with panel survey data from Britain. We argue that perceptions of changes in individual economic circumstances influence voter support for incumbent and opposition parties. Importantly, however, the degree of such pocketbook voting depends on whether individuals can easily hold the government responsible for these changes. Instead of assuming that voters attribute responsibility for all changes in their financial situation equally to the government, we argue that changes in personal circumstances have a greater effect on support for the incumbent when the changes can be linked directly to government policies. In other words, the attribution of responsibility for personal gains or losses is a crucial conditioning factor.

This paper also uses much better quality data than is normally the case to test these ideas. The economic voting literature has become increasingly concerned with issues of endogeneity: in essence the problem of whether vote choices cause economic perceptions rather than vice versa (Evans and Andersen 2006; Lewis-Beck et al 2008; Marsh and Tilley 2010; Tilley et al 2008). Here we use data from the British Household Panel Survey. By using repeated observations of the same people, over a long time span, which includes different incumbent governments, we aim to minimize problems of causal inference.

Our analysis demonstrates that in contrast to the assumption in most of the purely survey-based economic voting literature, voters' evaluations of changes in their personal finances do shift party support. When people think that they are personally worse off, they are less likely to support the governing party, and when they are personally better off, they are more likely to support the governing party. We also show that these effects depend on why people think their material conditions have changed. Changes that are difficult to attribute to the government have much less effect than those that are easy to blame on the government. In particular changes due to welfare benefits going up or down make a big difference to party choice, whereas changes due to earnings going up or down make much less difference. These findings have important implications for the study of economic voting, and more broadly for our understanding of how voters hold governments to account.

### **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 analysed 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, 1973; Norpoth 1985). However, because of the country-level nature of these studies, it was difficult to disentangle the individual-level reward-punishment mechanism of the reward-punishment. In recent decades most studies have therefore employed survey data, using 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’, or by changes to the national economy? Most studies have found little empirical support for the idea that people vote with their pocketbooks (Kinder and Kiewit 1979; Feldman 1982; Lewis-Beck and Stegmaier 2000; Sears 1993; Soss and Schram 2007). In a review of a large number of published studies on economic voting, Lewis-Beck and Stegmaier (2007) conclude that the empirical support for the pocketbook voting model is marginal at best. Instead the consensus within the field has been that sociotropic evaluations shape vote choices while personal economic experiences and political behaviour “inhabit separate mental domains” (Kiewit 1983: 523).

This conclusion is surprising. It seems a compelling idea that party preferences are shaped by economic self-interest. We would expect that when personal or household financial conditions have deteriorated, voters are more likely to punish the incumbent. Indeed, this is an underlying assumption in theoretical models of how politicians tactically redistribute resources, suggesting that politicians certainly believe that citizens vote with their pocketbooks (Dahlberg and Johansson 2002). There is also plenty of evidence that suggests politicians strategically use public budgets to keep constituents happy (Mayhew 1974; Shepsle and Weingast 1981; Lindbeck and Weibull 1987; Cox and McCubbins 1986; Levitt and Snyder 1997). 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 governments when they benefit from public transfers and punish them when public spending cuts affect them. ‘Pork barrel politics’ where incumbents gain electoral advantages by distributing private goods only works if citizens vote on that basis.

Given that these sorts of strategic considerations are more likely to occur in the US, it is perhaps not surprising that studies that have sought to carefully operationalize pocketbook considerations do find some evidence for their effects in Congressional elections (Romero and Stambough 1995; Alvarez and Saving 1997; Levitt and Snyder 1997, Ansolabehere and Snyder 2006). Perhaps even more promisingly for the pocketbook model, another strand of research has identified real effects of specific changes in policy on the behaviour and attitudes of those affected. Rather than analysing 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 the party preferences of those who were affected by this change. Examples of where such policy effects have been found include studies of 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), and budget cuts affecting parents with young children in Sweden (Elinder et al 2015). Voters do respond self-interestedly to specific policy changes, and some of this self-interest is related to direct financial benefits.

Putting together these papers on Congressional elections and specific policy changes it makes sense to revisit the pocketbook voting hypothesis more broadly. The aim of this paper is to return to the classic model of pocketbook voting by examining whether subjective changes in personal financial circumstances shape support for the incumbent, using high quality panel survey data in a more typical party based parliamentary system. We expect to see effects of changes in perceptions of financial circumstances on party support. Specifically, we hypothesize that if personal financial conditions have improved, voters will reward the incumbent governing party. In contrast when personal financial circumstances are seen to

have deteriorated, voters are more likely to support the opposition. This leads to a straightforward hypothesis as below:

*H1:* Individuals who think their personal financial situation has improved are more likely to support the incumbent party than individuals who think their personal financial situation has deteriorated.

We do not necessarily argue that all changes in personal finances are acting as useful heuristics for ascertaining how well the incumbent has performed, as Fiorina (1981) suggests in the opening quote of the paper, however. This is because we amend the basic model of pocketbook voting in one crucial way. We expect that such voting is more likely to occur when citizens attribute responsibility for the changes in their personal economic situation to the government of the day. Changes that are within the government's remit will be more important for voters. Because of this, it is less macro-economic change driving party preferences via personal finances, but rather government policies driving 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 here that pocketbook voting is more likely to occur when people actually hold the government responsible, at least in part, for change. There is plenty of evidence to suggest that attribution of responsibility moderates economic voting in studies that have focused on *sociotropic* economic voting (Rudolph 2003; Rudolph and Grant 2002; Marsh and Tilley 2008). The basic argument is that greater clarity of responsibility facilitates economic voting and therefore electoral accountability. In a 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 make it more difficult for voters to assign responsibility and 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 & Palmer 1999; Anderson 2000; Nadeau et al. 2002; Hobolt et al 2011). 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 1988, 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; Hobolt and Tilley 2014).<sup>2</sup> Moreover there are differences in the actual causes of

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<sup>2</sup> Relatedly, Gomez and Wilson (2001, 2008) 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 (2001, 2006, 2008) argue that politically unsophisticated individuals will tend to focus on single, obvious causes for events or conditions, e.g. the president or indeed themselves. We find only weak support for this idea. Although politically uninterested people (our best measure of political sophistication is



changes in personal incomes that will lead individuals to assign more or less responsibility to the government. Put simply, some changes are clearly 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 spending. 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 welfare benefits than if they earn more money because of a new job or promotion. In the former situation, voters will 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 changes in perceptions of the personal financial situation 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 data from the British Household Panel Survey (BHPS), which ran every year from 1991 until 2008.<sup>3</sup> Our dependent variable is party support. This is measured using three questions. The first asks whether respondents think of themselves as a

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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 over the time periods that we look at.

<sup>3</sup> After the 2008 wave the BHPS was discontinued although many of the participants formed part of a new 'Understanding Society' longitudinal survey. Unfortunately the Understanding Society questionnaire dropped some of the key questions that we use here and so we are restricted to the 1991-2008 time period covered by the BHPS.

‘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’.<sup>4</sup> In essence, this is a measure of vote in years when there are no elections and is widely used in the British case (Evans and Tilley 2012a, 2012b; Tilley 2015). It has the big advantage of measuring people’s party preferences, separately from their actual choice in their constituency. This greatly reduces the problem of tactical voters, that is people who prefer candidate A, but vote for Candidate B because Candidate A cannot win in their constituency, that the plurality electoral system introduces in the Britain. It also makes any tests slightly more conservative, as the nature of party support is likely to shift less than actual vote choice. We exclude Northern Irish participants from the sample, as there is a radically different party system in place in Northern Ireland (and in many ways a different set of governing parties over portions of the period we are interested in, since many powers were devolved to the Northern Irish Assembly from 1998).<sup>5</sup> We also

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<sup>4</sup> 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. The other way of operationalizing party support would be to use only the first two questions. Doing that gives similar results to the ones presented here.

<sup>5</sup> Although Scotland and Wales have had partially devolved government since 1999, for the majority of this period the main governing party from 1999 to 2008 in both the Scottish Parliament and Welsh Assembly, as in Westminster, was Labour. In Scotland, Labour formed a coalition government with the Liberal Democrats from 1999-2007, although the Scottish National Party formed a minority government from 2007-2011. In Wales, Labour governed in coalition with the Liberal Democrats from 1999-2003, as a single party government from 2003-2007 and in coalition with Plaid Cymru from 2007-2011. Overall, when Labour were in power in Westminster, they were also in power in the devolved institutions, which means people’s party preferences should react to changing economic circumstances in similar ways in all parts of mainland Britain. If we restrict

exclude any respondents under 18 who are not eligible to vote in general elections. This leaves us with a sample of 9,354 respondents during the Conservative government (1991-1996) and 17,183 respondents during the Labour government (1997-2008).

About 40 per cent of the respondents 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 Conservative supporters, 36 per cent Labour supporters, 12 per cent Liberal Democrat supporters, 7 per cent support other smaller parties (mainly the two nationalist parties, but also the Greens) and 23 per cent do not support a party. As we might expect this varies over time to some extent, although there is not a huge amount of change. 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.

Our two main independent variables are measures of changing personal financial circumstances. The first of these is a widely used question about change over the last year (see Lewis-Beck and Stegmair 2000, 2007). The exact wording 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 our total repeated sample reports no change in income, 27 per cent an increase and 24 per cent a decrease. For anyone that said that they were better or worse off, this is then

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our analyses to just England, we find very similar results to the ones that we present here, which suggests that this assumption is accurate. The results are available upon request from the authors.

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 benefits, reduced expenses, other increases in income, decreased earnings, decreased government benefits, increased expenses, other decreases in income.<sup>6</sup> We divide it up in this way because most people’s income is labour income or transfer income. If we take 2008, the last wave of our panel, about 65 per cent of people have earnings income and about 48 per cent have some government transfer income. For people with some labour income in 1991, the median value is £8,450 per year, for people with some benefit income the median value is £1,715 per year. Of those saying their income increased, 59 per cent credit increased earnings, 13 per cent decreased expenses and 8 per cent increased benefits. Of those saying their income decreased, exactly half mentioned increased expenses, 28 per cent decreased earnings and 4 per cent blamed decreased benefits.

The goal of our empirical strategy 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, which re-interviews the same people year after year. We thus need to model the dynamics of party support, given changes in personal finances. There are three parts to this. First, we need a model which accounts for autocorrelation among individuals’ successive

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<sup>6</sup> This represents a slightly reduced categorization from the original coding by the BHPS. 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.

measures of 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, and in particular people's initial party support is likely to be related to large number of other factors. 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  $t-1$ .<sup>7</sup>

The model's transition dynamics are described by a series of logit equations modeling the probability of being in state  $a$  instead of  $b$  (for example, supporting the Conservatives instead of Labour). Crucially these include lagged party support effects. A big advantage of these Markov models is that we can include the full set of party support options. Even better, these models allow the transition probabilities in and out of party support to differ between surveys. This means that we can capture overall time effects of the changing nature of party fortunes, whether due to leadership changes, political scandals or whatever. By then including a measure of change to people's subjective finances we can calculate the average effect of personal financial changes on the probability of someone updating their support for any of the parties at time  $t$ .<sup>8</sup>

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<sup>7</sup> Two recent articles by Clarke and McCutcheon (2009) and Neundorff et al. (2011) demonstrate that Markov models correctly specify the dynamics of individual-level party support. In Appendix 1 we also present the results of standard fixed-effects models, predicting support for the incumbent party for our two government periods. The results confirm the pocketbook voting hypothesis that respondents that report worsening personal finances are less likely to support the incumbent.

<sup>8</sup> 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.

Finally, it is important to account for the fact that different types of people when they enter our panel are more or less likely to support one party or another, and the same factors that predict party support might be correlated with switching parties or changing household finances. We therefore control for a range of social characteristics at the point at which people first entered the panel. 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.<sup>9</sup>

## **Analysis**

Our first question is straightforward. Do changes in people's household finances affect their support for governing and opposition parties? To answer that 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. As the BHPS fieldwork is carried out in autumn and the 1997 general election was on the 1<sup>st</sup> May, we use the 1997 data to provide a starting point for people in the second period. Table 1 shows the effects of personal finances on the transition probabilities of changing party support over

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<sup>9</sup> Two obvious missing variables here are race and union membership. Unfortunately neither of these is asked consistently over the BHPS and so cannot be used. Given that the inclusion of the other control variables makes little difference to our results, it seems unlikely that adding in these two variables would radically change our conclusions however. We also do not have consistently measured items that concern 'socio-tropic' economic voting. Nonetheless the inclusion of two questions that were asked in 1992, 1994 and 1996, in models restricted to those three years, that queried whether respondents were concerned about rates of inflation and unemployment in Britain make no difference to our results. Appendix ? shows these models.

these two periods.<sup>10</sup> Table 1 reports 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 here, which allows us to compare the effect of all three options rather than using one as a reference category.

#### TABLE 1 ABOUT HERE

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, 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 Labour. When people's household finances improve they reward the governing party and punish the opposition, when their household finances deteriorate they

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<sup>10</sup> The full models, which include the control variables when people enter the panel, are available on request. 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.

punish the governing party and reward the opposition. Hence, these findings provide support for our first hypothesis.

These are important results. People's party choices are affected by their changing finances. These effects have an impact on support for government and opposition parties, are apparent during periods of different party rule and are found despite the very conservative modelling strategy that we employ.<sup>11</sup> People's household finances matter, as set out in hypothesis 1. How much they matter is slightly more difficult to see from Table 1. Table 2 shows how we predict 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, people that 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 stay with the Conservatives whereas 83 per cent of the latter group stick with the party. 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, 12 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 exact 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,

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<sup>11</sup> An even more conservative modelling strategy would account for endogeneity between party support and personal financial evaluations. Appendix 2 shows the results of cross-lagged models that do this. The results are very similar to those that we present here.



and similarly the Conservatives are more likely to pick up supporters when people 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 don't change their party support from one year to another. Any differences due to changing financial circumstances will be quite small when measured from one year to the next because very few people 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. We certainly cannot claim that at the individual level at one point in time changing financial circumstances are a good predictor of party support, but they are a relatively good predictor of how people switch their party support, given how few people switch.

Contrary to the received wisdom, people do change their party preferences based on their own financial circumstances. The question that remains is whether it matters why those circumstances changed? As hypothesis 2 suggests, do voters distinguish between changes that are outside the government's control and changes that the government could plausibly be responsible for? We test this by looking at 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.

Since we are simply breaking down the ‘getting better’ and ‘getting worse’ categories, we naturally see 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. There is nonetheless quite a bit of variation in the size of those coefficients depending on why people thought things had got worse or better. Moreover this variation is very interestingly patterned. During the period of Conservative rule in the 1990s the biggest negative effect by far on Conservative support is for people whose finances worsened due to decreased welfare payments and the biggest positive effect is for people whose 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 benefits 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.

TABLE 3 ABOUT HERE

This pattern fits extremely well with an account of government responsibility. Changes in earnings and expenses are, for most people, far removed from government activities, whereas benefits are paid by the government. Compare the myriad of reasons why I might be earning more money this year than last with the reality of receiving more 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 benefit changes compared to everything else. The effects of welfare benefit changes on people's party choices are substantial.

Figure 1 below shows how our model predicts that benefit changes affect government support over the two time periods 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 of people that supported the Conservatives last year and saw their benefits decrease 73 per cent would support the Conservatives this year. For similar people who saw their benefits 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 benefits than if they think they are worse off due to lower benefits.

FIGURE 1 ABOUT HERE

Equally, defection rates to governing parties are much greater when people see their benefits increase than when they see their 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 substantial differences between people who said their benefits increased compared to those whose benefits decreased. Fewer people moved to the governing party (whether Labour or Conservative) if they were worse off due to changes to their benefits than did people who were better off. Overall the rates of defection to incumbent parties for gainers from benefit changes are almost double those for losers of benefit changes.

FIGURE 2 ABOUT HERE

### **Conclusion**

One could read our findings as supporting a model of economic voting that is rooted in personal experience. People switch party preference when their own personal finances change: if I feel personally better off, then I will be more likely to support an incumbent party. Naturally, this lends support to accounts of performance voting that focus not on news of grand macro-economic change, mediated by the mass media, but voters rewarding and punishing parties for improvements in their everyday lives. Should we therefore conclude that when household finances are generally getting worse opposition politicians should be asking the question of voters ‘are you better off than five years ago’? The answer to that is less clear for several reasons.

First, there are not that many occasions when there are substantially more people thinking they are worse off than better off, or vice versa. The biggest differences in our dataset come in 2001 and 2008. In 2001, at the height of the economic boom, 31 per cent of people 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. Personal finances do track the wider economy, but not that closely. 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. But 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 while personal finances may explain how individuals change their party preferences, they are inevitably less good at explaining aggregate change in the electorate.

Second, as our second hypothesis surmised, personal finances have a greater impact when they can be directly linked to the actions of the state. Just as perceptions of the wider economy matter more when it is clear that the government, or indeed a particular party, was responsible for changes to the general economic situation, changes to individuals' 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 changes to welfare payments. These are of course changes to sums of money that are paid to people by government agencies. This seems a rather different form of reward and punishment than is normally assumed to affect governments when voters judge them on performance. Indeed this seems much closer to claims about direct material self-interest in

terms of flood relief (Bechtel and Hainmueller 2011) or childcare payments (Elinder et al 2015).

In that sense, our findings here allow us to explain when personal financial self-interest matters. Voters do not really ask themselves the question of whether they are better off than they were last year when forming their party preferences, unless the reason for being better or worse off is directly due to the government. We would argue that this helps to square the circle of an expectation of pocketbook voting with its limited reality. There is pocketbook voting, but only when the name on the cheque is the government of the day.

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

a) 1991-1996 period with Conservative government

	Conservatives		Labour		Liberals		None	
	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>
<i>Finances</i>								
Got worse	-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
Got better	0.05*	0.02	-0.05*	0.02	-0.02	0.03	-0.04*	0.02

N = 9,354. \* p<0.05, \*\* p<0.01.

b) 1997-2008 period with Labour government

	Conservatives		Labour		Liberals		None	
	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>
<i>Finances</i>								
Got worse	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
Got better	-0.04**	0.01	0.02	0.01	0.01	0.01	0.01	0.01

N = 17,183. \* p<0.05, \*\* p<0.01.

Note: Other minor parties are included in the models, but not shown here. 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.

TABLE 2: Predicted proportion of people supporting the Conservatives and Labour given their previous financial circumstances and party support

CONSERVATIVE GOVERNMENT (1991-1996)							
		Conservative support			Labour support		
Financial change		Worse off	Better off	<i>Difference</i>	Worse off	Better off	<i>Difference</i>
Previous party support	Conservative	80.0%	83.3%	-3.3%	4.6%	3.7%	+0.9%
	Labour	1.8%	2.2%	-0.5%	87.6%	86.5%	+1.1%
	Liberal	6.3%	7.1%	-0.9%	15.7%	15.4%	+0.3%
	None	12.5%	14.5%	-2.0%	17.8%	16.6%	+1.1%

LABOUR GOVERNMENT (1997-2008)							
		Conservative support			Labour support		
Financial change		Worse off	Better off	<i>Difference</i>	Worse off	Better off	<i>Difference</i>
Previous party support	Conservative	83.9%	82.0%	+1.9%	2.9%	3.5%	-0.6%
	Labour	2.8%	2.6%	+0.3%	78.3%	79.2%	-0.9%
	Liberal	6.5%	6.0%	+0.5%	9.1%	9.7%	-0.6%
	None	9.6%	8.6%	+0.9%	11.9%	12.7%	-0.8%

Note: The estimates are based on the results presented in Table 1.

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

a) 1991-1996 period with Conservative government

	Conservatives		Labour		Liberals		None	
	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>
<i>Finances</i>								
Decreased benefits	-0.37*	0.15	0.12	0.12	0.23	0.14	-0.19	0.13
Decreased earnings	-0.18**	0.06	0.01	0.05	-0.02	0.06	0.09	0.05
Increased 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
No change	0.09**	0.03	0.00	0.03	-0.06	0.03	0.09**	0.03
Other increase	0.18**	0.07	-0.16*	0.07	-0.20**	0.08	-0.01	0.07
Reduced expenses	0.02	0.09	-0.04	0.08	0.04	0.09	0.05	0.08
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

N = 9,354. \* p<0.05, \*\* p<0.01.

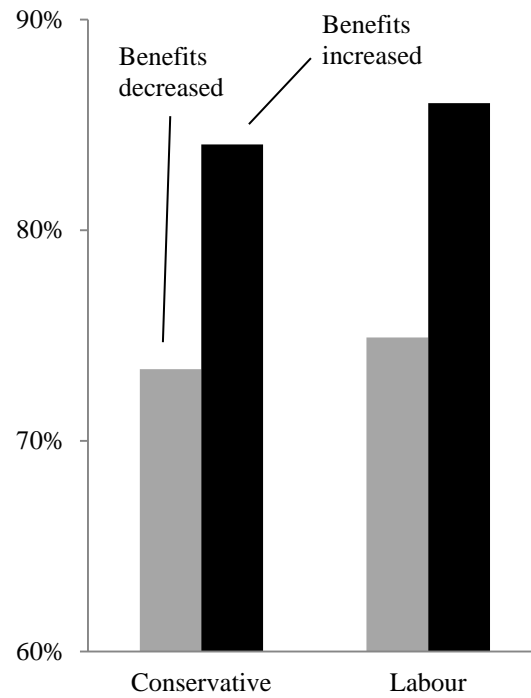
b) 1997-2008 period with Labour government

	Conservatives		Labour		Liberals		None	
	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>
<i>Finances</i>								
Decreased benefits	-0.16	0.11	-0.13	0.08	-0.23*	0.11	0.22**	0.07
Decreased earnings	-0.01	0.04	-0.02	0.03	0.02	0.04	0.04	0.03
Increased 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
No change	0.00	0.02	0.06**	0.02	0.01	0.02	0.01	0.01
Other increase	0.03	0.04	-0.03	0.03	0.03	0.04	-0.03	0.03
Reduced expenses	-0.05	0.05	0.00	0.04	0.07	0.05	0.04	0.03
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

N = 17,183. \* p<0.05, \*\* p<0.01.

Note: Other minor parties are included in the models, but not shown here. 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.

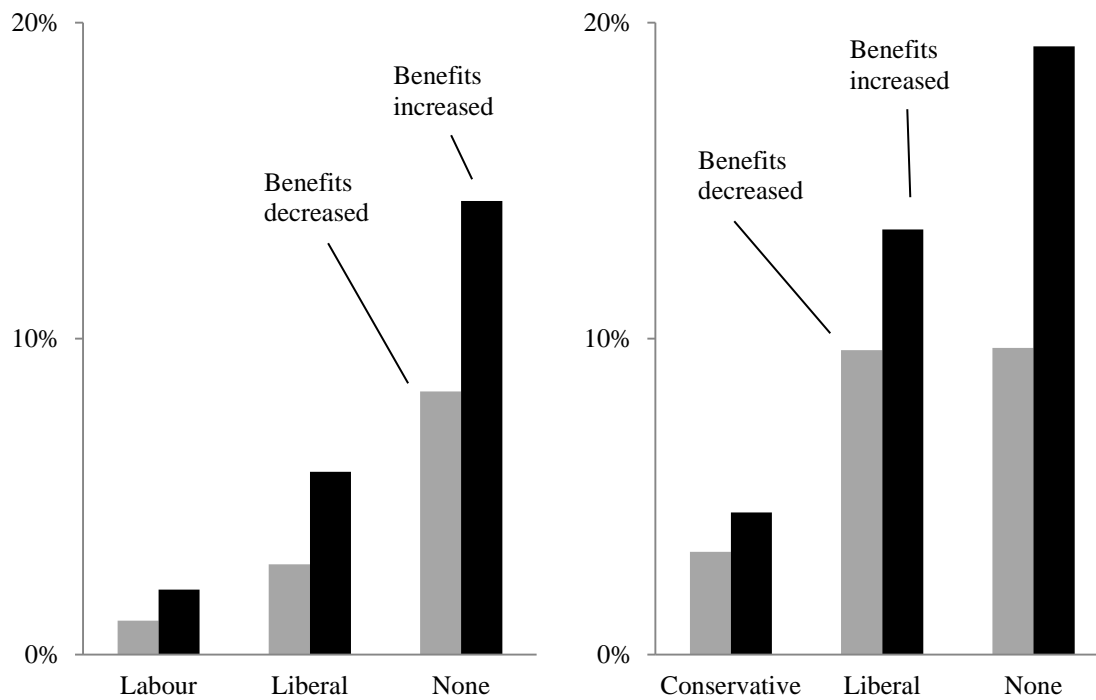
FIGURE 1: Predicted proportion of people staying loyal to the governing party given their changing benefit levels and previous support for the governing party



Note: Predicted probabilities calculated from Table 3. Conservative loyalist figures are for 1991-1996 and Labour loyalist figures are for 1997-2008.

FIGURE 2: Predicted proportion of people defecting to the governing party given their changing benefit levels and previous party support

a) 1991-96 (Conservative government)      b) 1997-2008 (Labour government)



Note: Predicted probabilities calculated from Table 3. Conservative defector figures are for 1991-1996 and Labour defector figures are for 1997-2008.

## Appendix 1

TABLE A1: Fixed effects logit regression model predicting government party support versus opposition or no party support

		Conservative government (1991-96)		Labour government (1998-2008)	
		<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>
Personal finances	<i>Worse off</i>	-0.16*	0.07	-0.14**	0.03
	<i>About the same</i>	-0.10	0.07	-0.11**	0.03
	<i>Better off</i>	-	-	-	-
Year	1991	-	-		
	1992	0.48	0.07		
	1993	-1.18**	0.07		
	1994	-2.04**	0.07		
	1995	-2.04**	0.08		
	1996	-1.80**	0.07		
	1998			-	-
	1999			-0.52**	0.05
	2000			-1.00**	0.05
	2001			-0.13**	0.05
	2002			-0.70**	0.05
	2003			-1.45**	0.05
	2004			-1.38**	0.05
	2005			-0.99**	0.05
	2006			-1.67**	0.05
	2007			-1.32**	0.05
	2008			-1.91**	0.06
N (people)		2,469		6,482	
N (Observations)		12,976		52,071	

\* p<0.05, \*\* p<0.01.

Note: The results are based on a fixed-effect model using a dummy variable predicting support for the incumbent party versus any other party or no party. Many respondents do not change their party support in the observed time period and they are therefore excluded from the analysis.

## **Appendix 2: Robustness tests**

One obvious issue with our results is the possible endogeneity of personal finance evaluations which might be driven by party support. We tested for this possibility by estimating cross-lagged models, in which we simultaneously model the dynamics of party support and subjective financial evaluation (Evans and Anderson 2006; Evans and Pickup 2010; Dancey and Goren 2010; Milazzo et al. 2012). The results are in Tables A2.1 and A2.2 below. To summarize it is clear that personal financial evolutions are partly a product of party support. People that support the opposition party see their own finances getting worse. This is particularly the case for Labour supporters under the Conservative government. Overall, the cross-lagged effects of party support on personal financial situations are trivial however. On the other side, the effects of lagged personal finances on party support remain extremely strong, even accounting for possible endogeneity. This additional analysis confirms that the pocketbook voting hypothesis holds even on the most conservative tests that we can use, which account for endogeneity between party support and personal financial evaluations.



TABLE A2.1: Cross-lagged effects of party support and personal finances for Conservative governments (1991-1996)

	Conservative		Labour		Liberal		Other		None	
	<i>coef.</i>	<i>se</i>	<i>coef.</i>	<i>se</i>	<i>coef.</i>	<i>se</i>	<i>coef.</i>	<i>se</i>	<i>coef.</i>	<i>se</i>
Intercept	-0.86 ***	0.15	1.02 ***	0.06	0.11	0.08	-0.89 ***	0.10	0.62 ***	0.07
<b>Party support (t-1)</b>										
Con	4.13 **	0.16	-1.78 **	0.10	-0.43 **	0.11	-1.60 **	0.19	-0.32 **	0.09
Lab	-1.22 **	0.30	3.55 **	0.11	-1.27 **	0.23	-0.45 *	0.21	-0.61 **	0.15
Lib-Dem	-0.83 **	0.27	-0.32 **	0.10	3.10 **	0.12	-0.88 **	0.21	-1.07 **	0.15
Other	-1.65 **	0.48	-0.99 **	0.18	-0.33	0.20	3.69 **	0.18	-0.71 **	0.20
None	-0.43	0.29	-0.45 **	0.13	-1.06 **	0.22	-0.76 **	0.25	2.70 **	0.13
<b>Financial change (t-1)</b>										
Same	0.32 **	0.06	-0.12 *	0.06	0.05	0.06	-0.32 **	0.12	0.09	0.06
Worse off	-0.31 **	0.06	0.08	0.06	-0.07	0.07	0.37 **	0.12	-0.08	0.07
Better off	-0.01	0.06	0.04	0.06	0.02	0.06	-0.05	0.13	-0.01	0.07
	Same		Better-off		Worse off					
	<i>coef.</i>	<i>se</i>	<i>coef.</i>	<i>se</i>	<i>coef.</i>	<i>se</i>				
Intercept	0.04	0.04	-0.02	0.04	-0.02	0.05				
<b>Financial change (t-1)</b>										
Same	1.78 **	0.07	-1.29 **	0.09	-0.48 **	0.07				
Worse off	-0.92 **	0.07	-0.42 **	0.07	1.35 **	0.07				
Better off	-0.85 **	0.08	1.72 **	0.07	-0.86 **	0.07				
<b>Party support (t-1)</b>										
Conservative	0.00	0.04	0.02	0.04	-0.02	0.03				
Labour	0.12 **	0.04	-0.14 **	0.04	0.02	0.03				
Liberal	-0.07	0.06	-0.06	0.05	0.13 **	0.04				
Other	-0.06	0.10	0.13	0.09	-0.06	0.08				
None	0.02	0.06	0.05	0.05	-0.07	0.04				

N = 9,354. \* p<0.05, \*\* p<0.01.

TABLE A2.2: Cross-lagged effects of party support and personal finances for Labour governments (1997-2008)

	Conservative		Labour		Liberal		Other		None	
	<i>coef.</i>	<i>se</i>	<i>coef.</i>	<i>se</i>	<i>coef.</i>	<i>se</i>	<i>coef.</i>	<i>se</i>	<i>coef.</i>	<i>se</i>
Intercept	-0.03	0.04	-0.11 **	0.04	-0.21 ***	0.04	-0.44 ***	0.04	0.79 ***	0.03
<b>Party support (t-1)</b>										
Con	-0.22 **	0.06	-0.81 **	0.07	-0.99 **	0.08	-0.56 **	0.07	2.58 **	0.04
Lab	-1.77 **	0.16	-0.78 **	0.11	-0.84 **	0.11	3.94 **	0.07	-0.55 **	0.08
Lib-Dem	-0.56 **	0.07	-0.80 **	0.07	3.19 **	0.05	-0.95 **	0.08	-0.87 **	0.05
Other	-1.44 **	0.07	3.56 **	0.05	-0.52 **	0.06	-1.09 **	0.07	-0.52 **	0.04
None	3.99 **	0.06	-1.17 **	0.09	-0.84 **	0.08	-1.34 **	0.11	-0.64 **	0.06
<b>Financial change (t-1)</b>										
Same	0.05	0.04	-0.13 **	0.04	-0.02	0.04	0.14 *	0.06	-0.04	0.03
Worse off	0.00	0.04	-0.03	0.03	0.03	0.04	-0.07	0.05	0.07 *	0.03
Better off	-0.05	0.03	0.16 **	0.03	-0.01	0.03	-0.07	0.04	-0.03	0.03
	Same		Better-off		Worse off					
	<i>coef.</i>	<i>se</i>	<i>coef.</i>	<i>se</i>	<i>coef.</i>	<i>se</i>				
Intercept	0.28 **	0.02	-0.29 ***	0.03	0.01	0.03				
<b>Financial change (t-1)</b>										
Same	-1.11 **	0.04	-0.50 **	0.05	1.60 **	0.04				
Worse off	-0.93 **	0.04	2.09 **	0.05	-1.16 **	0.04				
Better off	2.04 **	0.05	-1.60 **	0.07	-0.44 **	0.05				
<b>Party support (t-1)</b>										
Con	0.05 *	0.02	-0.06 *	0.03	0.01	0.02				
Lab	-0.05	0.03	0.07	0.04	-0.02	0.03				
Lib-Dem	-0.08 **	0.03	0.04	0.03	0.04	0.03				
Other	0.09 **	0.02	0.06 **	0.02	-0.15 **	0.02				
None	-0.02	0.02	-0.11 **	0.02	0.12 **	0.02				

N = 17,183. \* p<0.05, \*\* p<0.01.

### Appendix 3

TABLE A3: Predicting transition probabilities of party support at  $t$  by financial change (1991-1996) including perceptions of the national economy

	CONSERVATIVE GOVERNMENT							
	Conservative		Labour		Liberal		None	
	<i>coef.</i>	<i>se</i>	<i>coef.</i>	<i>se</i>	<i>coef.</i>	<i>se</i>	<i>coef.</i>	<i>se</i>
Worse off	-0.10 **	0.02	0.03 *	0.02	0.04 *	0.02	-0.01	0.02
Same	0.06 **	0.02	0.01	0.02	-0.02	0.02	0.04 **	0.02
Better off	0.04 *	0.02	-0.04 **	0.02	-0.02	0.03	-0.04 *	0.02
Concerned with Inflation	-0.12 **	0.03	0.09 **	0.02	0.02	0.03	0.06 **	0.03
Worse off	-0.10 **	0.02	0.03	0.02	0.04 *	0.02	0.00	0.02
Same	0.06 **	0.02	0.01	0.02	-0.02	0.02	0.05 **	0.02
Better off	0.04 *	0.02	-0.04 *	0.02	-0.02	0.03	-0.05 **	0.02
Concerned with Unemployment	-0.23 **	0.03	0.29 **	0.03	0.13 **	0.04	-0.19 **	0.03

N = ?. \* p<0.05, \*\* p<0.01.

Note: The indicators about the national economy were only included 1992, 1994, and 1996.