

The American Voter Goes Shopping: Micro-Foundations of the Partisan Economy*

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Abstract

While research shows that partisanship influences beliefs about the economy, it is yet to be established whether individual partisans engage in systematically different economic behaviors. Focusing on consumer behavior, the single largest determinant of economic activity in the United States, we develop a model of voters whose purchasing behavior is driven, in part, by their politically induced evaluations of macroeconomic conditions. We hypothesize that partisans will engage in systematically different consumption patterns of everyday goods, depending on whether their preferred party is in charge of economic policy. To evaluate whether partisan influences on consumer sentiment translate into partisan differences in consumer behavior, we utilize aggregate surveys of economic opinions, as well as individual-level surveys conducted before and after the 2000 presidential election of 36,000 respondents who provide detailed data about variety of economic behaviors. Our results show that Republicans had consistently more positive evaluations of the economy than Democrats, and this partisan gap in evaluations became more pronounced in the aftermath of the 2000 election. Moreover, our analyses of consumption behavior before and after the election show that elections indeed induce partisan divergence in how partisans consume, but these effects are modest and short lived.

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According to an Associated Press story that ran just days after the U.S. presidential election of 2008, “When 10-year-old Austin Smith heard Barack Obama had been elected president, he had one question: Does this mean I won’t get a new gun for Christmas? That brought his mother, the camouflage-clad Rachel Smith, to Bob Moates Sports Shop on Thursday, where she was picking out that special 20-gauge shotgun—one of at least five weapons she plans to buy before Obama takes office in January” (AP November 8, 2008).

Is economic activity politically motivated, as the AP story suggests? And do elections help to trigger politically motivated buying? While recent research suggests that partisans of incumbent presidents offer systematically more positive evaluations of the macroeconomy, it is yet to be established whether partisans of different stripes engage in systematically different economic behaviors, and if so, what role elections play in this. If partisans in fact do consume differently, classic assumptions in economic and political behavior will be difficult to sustain. These include, among others, that the influence of partisanship is predominantly political in nature and the presumption that economic outcomes are exogenous to political beliefs and behaviors.

Focusing on consumption, the single largest determinant of economic activity in the United States, we develop a model of partisan voters whose purchasing behavior is driven, in part, by their electorally induced evaluations of economic conditions. We argue that partisans will engage in systematically different consumption patterns of everyday goods, depending on whether their preferred party won the election. We expect that supporters of the president’s party will purchase more than supporters of the opposition party, and that this difference is driven by the outcomes of elections.

To test our claim of partisan differences in actual consumer behavior, we utilize a unique set of surveys of household expenditures collected in 2000 and 2001. These surveys are based on nationwide samples of over 36,000 respondents who provided detailed data about recent and future purchases and economic activities. Importantly for our interests, the sur-

veys also ask political questions, including partisan registration. By evaluating surveys that correspond to periods when Democrats and Republicans diverged in their consumer sentiment, we can evaluate whether Republicans' and Democrats' actual consumption (both with regard to the kinds of products they buy and the amounts they spend) corresponded with their economic evaluations and whether consumption patterns of Democrats and Republicans changed before and after the 2000 election.

In doing so, this paper provides the first micro-level evidence of whether political attitudes influence economic behavior in the form of individual consumption behavior. Our results suggest an expanded role for partisanship in voter behavior through its effect on economic outcomes, and it argues for a reassessment of basic assumptions about the links among the economy, elections, and voter behavior. We proceed as follows: the next sections present and elaborate our argument; we then describe our data and measures, present our analyses and discuss our findings, and finally conclude by offering suggestions for further research.

Linking the Subjective and Objective Economy

Political scientists have long been interested in the connection between the economy and the behavior of citizens. Since the earliest days (cf. Tibbits 1931), the basic model underlying research on economic voting has posited a relationship running from macroeconomic performance to voter behavior.¹ While frequently unstated, this traditional model of the economy-behavior link assumes a causal chain that runs from the objective economy to po-

¹For many years, this “classic” model typically was tested by estimating the relationship between a set of objective macroeconomic indicators (e.g., inflation, unemployment, economic growth, income growth, etc.) and some measure of government support, either in the form of election outcomes or popularity (for seminal papers in this tradition, see Goodhart and Bhansali 1970; Kramer 1971; Stigler 1973). With the notable exception of Stigler’s work, virtually all studies found that a good economy increases support for the government and that a bad economy decreases it. Although later research sought to refine modeling strategies and specifications while testing the validity of earlier findings in different contexts, the basic conclusions of strong aggregate level results only seldom were called into question (for a comprehensive review, see Anderson 2007).

litical behavior via voters' economic opinions (Anderson 2007). That is, economic opinions matter to political scientists because they are viewed as the most proximate reflection of economic outcomes and most proximate predictor of voter behavior.

Importantly, this model implies that there is a link between macroeconomic performance and economic opinions and that the objective (or "real") economy is exogenous to the subjective (or "perceived") economy. To date, the plausibility of these assumptions has not typically been tested, but inferred from existing evidence. For one, they are consistent with research on aggregate public opinion, which has reported significant congruence of objective and subjective economy, and thus support for the assumption that the objective economy drives public opinion (see, e.g., Hibbs 1987; Haller and Norpoth 1994; MacKuen, Erikson, and Stimson 1992). In *The Rational Public*, for example, Benjamin Page and Robert Shapiro (1992, 121-22) noted explicitly that public opinion moves in response to "real world conditions," particularly unemployment and inflation. They concluded that "[o]pinions about employment, inflation, taxes, and energy, for example, related in systematic and consistent ways to objective trends in prices and unemployment rates" (Page & Shapiro 1992, 160).

While economic opinions and facts may well be correlated, such findings say little about the causal direction of this connection. In contrast to political scientists who have long assumed that the objective economy drives economic evaluations, economists have focused on how economic opinions shape economic decision-making. That is, economists have posited a causal connection between the "real" and the "subjective" economy that runs from people's opinions to measurable economic outcomes and thus counter to the classic model that underlies economic voting research outlined above.

In economics, the economy-behavior link has been studied most extensively at the macro-level and in the context of the relationship between consumer confidence and consumption. Specifically, macroeconomists for some time now have examined the link between citizens' evaluations of the economy in the form of consumer confidence on one hand and economic

activity on the other (cf. Hymans 1970; Katona 1974, 1975; Mueller 1963), trying establish whether consumer confidence not only has the ability to forecast, but explain, changes in macro-economic activity (Kinsey and Collins 1991; Carroll, Fuhrer, and Wilcox 1994; Fuhrer 1988, 1993; Matsusaka and Sbordone 1995). Thus, in this economic model, economic opinions (the subjective perceived economy) drive actual economic activity and, therefore, changes in the real economy.²

The Partisan Sources of Individual Economic Behavior

As we noted above, political scientists have long cared about economic opinions because they presumably shape political behavior, and economists believe that they are key to understanding economic outcomes. While economists and political scientists differ about the direction of the causal connection between economic opinions and economic activity, they agree that economic opinions are central. Moreover, in line with recent research in political science, we suspect that partisanship is a key factor shaping economic opinions. Finally, we conjecture that partisanship, perhaps through its influence on economic opinions, shapes economic behavior.

In recent years, political scientists have continued to investigate economic opinions by paying increased attention to the factors that shape them. As a result of these efforts, they have started to come to the conclusion that economic opinions are tinged with partisanship—that is, that politics is at the root of such opinions. If true, and if the economists’ claim of

²Among the most commonly cited studies on this topic are those of Carroll, Fuhrer, and Wilcox (1994) and Acemoglu and Scott (1994). In a study of the U.S. from 1955 to 1992, Carroll, Fuhrer, and Wilcox (1994), for example, report that changes in consumer confidence not only forecast but cause changes in household spending. In a further test of Carroll, Fuhrer, and Wilcox’s study, Delorme, Kamerschen, and Voeks (2001) conclude that consumer confidence is a highly reliable predictor of macroeconomic activity in the United States (see also Eppright, Arguea, and Huth 1998; Matsusaka and Sbordone 1995). Moreover, they find that “confidence is a strong predictor of the consumption of both motor vehicles and goods excluding motor vehicles” (Delorme, Kamerschen, and Voeks 2001: 869).

a causal connection between economic opinion and economic activity is accurate, economic behavior may in part be driven by political considerations. We posit that there are two ways in which political orientations could shape economic behavior via economic opinions, and both involve partisanship. One has to do with differences in economic opinions that are purely driven by partisan differences, depending on which party controls the White House. The other has to do with the effect that election campaigns have on the outlook of partisans and concomitantly, their economic behavior.

Since the behavioral revolution in political science, partisanship (or partisan attachment) has been a fundamental organizing concept for understanding voter behavior. More specifically, it has been considered a major factor in shaping people's attitudes about politics and, subsequently, their behavior. Following *The American Voter*, party identification typically has been conceptualized as an individual's enduring affective attachment to a political party that is the product of early socialization experiences (Campbell et al. 1960, 1966; Hess and Torney 1967; Franklin and Jackson 1983; Franklin 1984).³ As a kind of social identity, this conceptualization is rooted in reference group theory and reflects the idea that individuals often define aspects of the self in terms of secondary groups in society, including political parties (Campbell et al. 1960, Ch 6; Green, Palmquist, and Schickler 2002). Critical for our purposes is the idea that partisanship, once acquired, subsequently shapes how new political information is interpreted. It thus acts as a so-called "perceptual screen through which the individual tends to see what is favorable to his partisan orientation" (Campbell et al. 1960: 133).

A growing body of research has sought to understand the impact of partisanship on the formation of economic opinions, and the ways in which partisanship works against a close relationship between economic facts and economic opinions at the individual level. In par-

³For researchers taking a rational choice perspective, such an attachment is more of a cognitive short-cut that represents a running tally of retrospective assessments of party performance (Fiorina 1981).

ticular, evidence suggests that individuals form evaluations of the state of the economy to be consistent with their partisanship (Evans and Andersen 2006; Evans and Pickup 2007; Wlezien, Franklin, and Twiggs 1997; but see Lewis-Beck, Nadeau, and Elias 2008). Traditionally, such differences were assumed to matter little for understanding the efficacy of the electorate's collective choice. For one, it had long been assumed that significant portions of individual-level differences are simply the result of "noise" or random variation associated with survey data (e.g., Page and Shapiro 1992; Sanders 2000). As a result, aggregation of individual responses was believed to "cancel out" the random variation, thereby leaving only the underlying meaningful (or rational) component of public opinion (Kramer 1983; Wittman 1989).

This argument presumes, however, that individual-level heterogeneity in measures of public opinion is truly random. As Bartels (1996) notes, however, if these individual errors are systematic, aggregation will not produce unbiased aggregate measures of public sentiment (see also, Althaus 1998). Rather, these aggregate measures will include systematic variation with factors, such as partisanship, which are unrelated to objective economic performance. As recent research suggests, the various sources of individual error terms in national economic evaluations are far from random, and these errors influence aggregate measures of economic opinions particularly during presidential election years (Duch, Palmer & Anderson 2000, 648). As a result, aggregate deviations of individual-level economic evaluations from objective economic conditions are not idiosyncratic but rather reflect the systematic effects of respondent partisanship and perhaps the dynamics of presidential election years.

At a minimum, the literatures reviewed above suggest that aggregate indicators of the perceived economy can be systematically biased, and that partisanship can shape these opinions to a considerable degree. Put simply, this literature challenges the assumption of a truthful translation of the real economy into people's economic attitudes as well as the assumption that economic opinions are exogenous to political attitudes and political behavior

(see also Wilcox and Wlezien 1996). What is more, if economic opinions are at least in part grounded in political considerations, then politics has the power to shape economic opinions and through them economic decisions and outcomes. By focusing on economic opinions as a dependent variable or independent variable predicting political behavior, political scientists to date have stopped short of drawing the logical connection between people's political motivations and economic behavior, rather than merely economic opinions. We seek to make this link explicit by examining the link between partisanship and consumption.

While partisanship has been conceptualized as an independent variable whose primary job is to explain vote choice and political attitudes, there is little reason to assume that the workings of the perceptual screen of partisanship need to be confined to the political domain. In fact, consistent with the literature on economic opinions reviewed above, we expect partisans of the incumbent administration to be motivated to view economic outcomes more positively—that is, in line with their predispositions—compared to partisans of the other side. If this is true, then we expect partisans of the incumbent President to have systematically more positive opinions than partisans of the opposition party.

Linking Partisanship to Consumer Choice: The Role of Elections

Consumer research has literally nothing to say about the political antecedents of consumption decisions and buyer behavior at the level of individual consumers. Standard textbooks and specialized research instead focus on ways in which consumers react to and process information about product prices, designs, and offerings (including the design and layout of stores and advertising). External influences such as culture and other social influences enter into the decision making of consumers only insofar they condition cross-cultural differences in patterns of consumption or the consumption of particular products for reasons of status or

identity (Schiffman & Kanuk 2000, O’Shaughnessy 1992, Ledgerwood, Liviatan & Carnevale 2007). According to the discipline of marketing, politics and elections do not matter for what people buy.

We think they do. Specifically, as we hypothesize above, the more optimistic views of partisan supporters of the president lead them to consume more and different mixes of products. A key question, however, is what role elections may play in producing divergent partisan economic opinions and possibly behaviors. Elections, and in particular, elections with a change in partisan control of the White House, are an ideal context in which to examine partisan differences in economic views because economic opinions should change in line with this change in partisan control.

If, in fact, a change in partisan control leads to a change in partisan opinion about the economy, does this also change what partisans consume? And if it does, are such changes lasting or temporary? Consistent with the former, we would expect elections to condition the effects of partisan economic opinions in that they rearrange who has the power to implement economic policy. Thus, in one version of our model, the mechanism that drives differential consumption among partisans is opinions about the macro-economy. Such a rejiggering of partisan economic opinions may be due to a rational calculus of differential future income streams, depending on partisan policies that will differentially benefit supporters of the president. Alternatively, changes in partisan opinions may simply be a reflection of cognitive dissonance avoidance. Regardless of the particular mechanism at work, we would expect partisan economic opinions to diverge in the aftermath of elections that see a turnover in partisan control, and their impact on economic behavior should last beyond the short term.

In contrast, it is possible that the impact of elections on partisan opinion and consumption is mostly ephemeral. During election season, the economy is typically a highly salient issue, and voters are bombarded with information about the state of the nation’s economy. But once the election is over and the election circus has moved on, economic considerations recede.

As a result, elections may have a short-term effect that is concentrated on partisans who think more about the economy right before the election and feel good about the outcome of the election in the immediate aftermath. Consistent with the finding that supporters of the winning party or candidate feel good about the election, while losers feel much less sanguine (Regan and Kilduff 1988; see also Craig et al. 2006; Ginsberg and Weisberg 1978), it may well be that elections provide partisans with a short term boost in positive emotions that wears off after the reality of government has set in and economic reality becomes harder to deny. If this is the case, elections induce differential consumption among partisans, but the impact of partisanship on economic behavior should be confined to the short term.

The only paper we are aware of that examines the partisan sources of consumption, and in particular the role that elections may play, is a recent study by Gerber and Huber (2009). Based on a theoretical model of partisan differences in expected income under different policy regimes, they examine changes in tax receipts across counties in the U.S. between 1992 and 2004 in the periods before and after presidential election contests. While not measuring consumption or partisan behavior directly—Gerber and Huber proxy consumption with the help of sales tax receipts and partisanship with the proportion of Democratic votes in a county—their results are strongly suggestive of a link between elections and economic behavior. Unfortunately, however, the nature of their analyses does not allow us to examine the behaviors of partisan consumers directly, nor does it allow us to distinguish between types of purchases and activities that partisanship influences. Put another way, while their theoretical model of consumption based on expected future income is plausible and their evidence consistent with their model, the evidence also is consistent with an alternative explanation we posit here.

Partisanship and Economic Opinions

Our analyses of the link between partisanship and economic opinions are focused on the period before and after the 2000 presidential election contest between George W. Bush and Al Gore. The 2000 election is a particularly appropriate case to examine because the election was hotly contested and the outcome uncertain. At the same time, economic conditions in the run-up to the election were clearly good, following on years of unparalleled growth in incomes across the board under President Clinton, minimizing the odds that economic perceptions were inaccurate prior to the election. Yet, the aftermath of the election saw a decline in macroeconomic output, increasing ambiguity in economic signals and the probability that partisan predispositions would color economic evaluations. Taken together, the context of the 2000 elections provides an almost ideal and best scenario test case for our hypotheses.

We perform two sets of tests to examine the partisan sources of economic opinions and behaviors in the American electorate. The first examines partisan differences in economic opinions. This will allow us to determine whether partisans of the incumbent president in fact exhibit more positive opinions of the economy than those who are not partisans of the current occupant of the White House, and whether elections change the nature of the divergence, if it in fact exists. The second set of tests examines the consumption behavior of partisans before and after elections, both in the short and medium term, to examine whether elections change the consumption patterns of partisans and whether any differences in partisan consumption produced by elections persist.

Aggregate Dynamics of Partisan Opinions Before and After the 2000 Election

To examine the validity of the claim of partisan economic opinions, we use the index of consumer sentiment, a standard measure of the public's view of the economy, as our starting

point. Because surveys of consumer sentiment, such as the economic surveys collected by the University of Michigan, do not ask about partisanship, we must proxy consumer sentiment with standard economic questions found in political surveys, such as the American National Election Study (ANES). Thus, we evaluate whether responses to standard economic questions asked in political surveys correspond to surveys that focus exclusively on consumer sentiment.

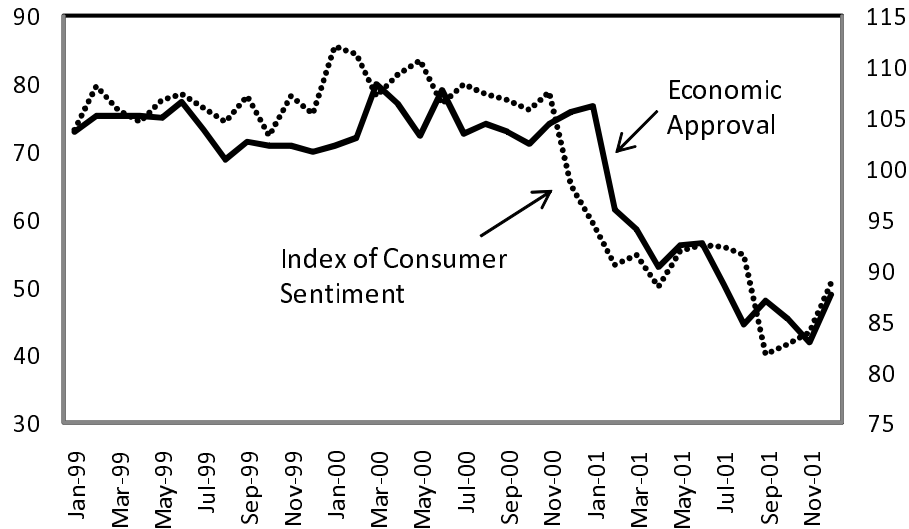


Figure 1: The Monthly Index of Consumer Sentiment and Economic Approval, January 1999 to December 2001

Figure 1, above, plots the University of Michigan’s Index of Consumer Sentiment and the percent approving of the economy, which comes from standard political surveys that also ask about partisanship.⁴ The data reveal that the economic evaluations from the political surveys correspond very closely with the index of consumer sentiment. The correlation

⁴The percent approving of the economy comes from Enns and McAvoy 2008. The series incorporates economic approval questions from monthly surveys conducted by Gallup, CBS, and ABC. The Gallup question asks, “How would you rate economic conditions in this country today—as excellent, good, only fair, or poor?” CBS asks, “How would you rate the condition of the national economy these days? Is it very good, fairly good, fairly bad, or very bad” CBS and ABC surveys also ask, “Do you think the nation’s economy is getting better, worse, or staying about the same?” For the Gallup series, the percent rating the economy as excellent or good was tabulated, and for the CBS series, the percent rating the economy as very good or fairly good was calculated. The individual surveys were combined using Stimson’s (1999) Dyad Ratios Algorithm, which uses a factor analytic approach to extract the common variance across series.

between the two series is $r=.88$. Given the similarity in survey questions used to construct both series, this should not be surprising. While there are a few differences, especially late in 1999 and subsequent to George W. Bush’s election in 2000, overall we are confident that consumer confidence surveys and standard surveys that include political questions capture similar opinions about the national economy.

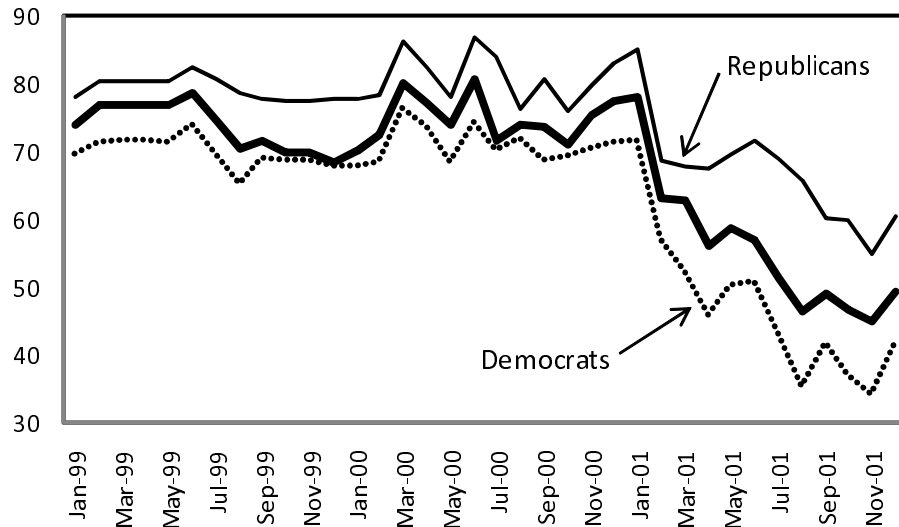


Figure 2: Monthly Economic Approval for Democrats, Independents, and Republicans, January 1999 to December 2001

Armed with confidence in the validity of the economic evaluation question as a proxy for consumer sentiment, we now turn to partisan differences in economic evaluations. Figure 2 shows that at the end of Bill Clinton’s term, after a prolonged period of prosperity and rising incomes in America, all partisans expressed positive economic evaluations, while all groups’ economic evaluations became more pessimistic during the course of 2001. However, contrary to a simple partisan economic opinion model, these data do not show differences that put supporters of the incumbent president in a consistently more optimistic mood about the economy. In fact, the opposite is true: Supporters of the incumbent President—Democrats—are consistently less positive in their evaluations of the nation’s economy than

Republicans.

At the same time, consistent with our other theoretical priors, the post-election decline exhibited by all partisans is most apparent among Democrats. “Out-party” supporters appear to take a much more jaundiced view of the economy as the economy suffers a decline than supporters of the “in-party.” Thus, these results suggest that partisans of the incumbent President are not necessarily more positive in their economic views. At the same time, the aftermath of the 2000 election clearly changed economic views in a way that is consistent with the expectations that partisans use a different lens to form opinions about the economy and the expectation that elections lead to changes in these opinions.

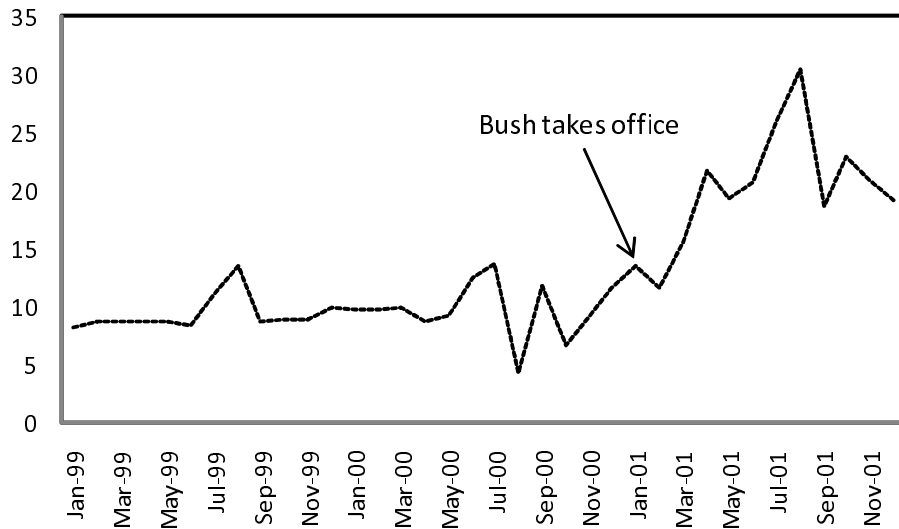


Figure 3: Gap in Partisan Evaluations of the Macroeconomy (Republicans’ economic approval minus Democrats’ economic approval)

Figure 3 offers a slightly different look at the same data. Here, we subtract mean economic evaluations of Democrats from mean Republican evaluations. The graph clearly reveals that the partisan gap in economic evaluations increases after George Bush takes office. The point of all this is to show that the survey data indeed suggest that partisans evaluated the economy differently after Bush was elected. Thus, if economic perceptions influence actual consumer

behavior, partisanship should affect economic behavior before and after the election—with Republicans making more purchases than Democrats both in 2000 and 2001—but this effect of partisanship on spending should be larger in 2001 than in 2000. In the following section we discuss data and measures and then test this hypothesis.

Partisan Consumption: Individual-Level Data and Measures

Our individual-level data come from the 2000 and 2001 National Consumer Survey (NCS). The NCS has been conducted since 1954, primarily for the purposes of understanding consumer preferences and behavior. It provides detailed information on consumer behavior, including actual and planned purchases, people’s lifestyles, and media consumption. The NCS is a repeated cross-sectional survey conducted twice a year, and each wave of the NCS typically surveys 10-15,000 adults (the sample for each wave is independently drawn), drawn from a multistage stratified probability sample. The final sample represents a representative probability sample of all adults living in households in the United States (excluding Hawaii and Alaska). The National Consumer Survey is widely used for commercial purposes by national and multinational brand owners, advertising agencies, and media companies to understand consumer behavior (<http://www.smr.com/web/guest/core-solutions/national-consumer-study>).

We utilize a number of measures from the NCS to construct our model of purchasing behavior. These include, primarily, variables to identify partisans and actual consumer behavior, as well as a host of control variables that can be expected to influence consumption. The analysis focuses on three surveys conducted in 2000 and 2001. We rely on this period because, as we have seen, after Bush takes office Republicans’ and Democrats’ economic evaluations diverge. This temporal variation allows us to evaluate whether overtime parti-

san consumption follows overtime patterns of partisan economic evaluations. Focusing the analysis on 2000 and 2001 provides the additional advantage that this period precedes and thus is unaffected by the polarized political climate that emerged toward the end of Bush's first term (Jacobson 2007, 7).⁵ Thus, our results do not reflect the uniquely partisan nature of the latter period of the Bush presidency. We are not able to analyze the period before 2000 because the NCS did not include relevant political questions.

Partisanship

Our measure of partisanship deserves special note. Prior to 2001, the NCS did not ask respondents their partisan identification. As a result, we do not have a direct measure of partisanship for the first survey in our analysis. Fortunately, the extensive variety of other political, demographic, and behavioral questions asked both in 2000 and 2001 allow us to instrument partisanship in the survey when it was not asked. We rely on Franklin's (1989) Two Stage Auxiliary Instrumental Variable (2SAIV) approach to accomplish this task. The underlying logic of 2SAIV is quite simple. We have a measure of partisanship in the 2001 data but not the 2000 data. Thus, we regress partisanship on a set of auxiliary variables that exist in both years.⁶ We then use the resulting coefficients to instrument partisanship in the 2000 data by multiplying the values of the 2000 auxiliary variables times the corresponding coefficient values from the first stage regression.

⁵During President Bush's first two years in office, the difference in approval ratings between Democrats and Republicans was roughly consistent with or below the average difference between partisan approval ratings of both Ronald Reagan and Bill Clinton.

⁶The NCS partisan question asks, "What party are you currently registered with, Democrat, Independent, Republican, Other?" This wording differs from the more common partisanship question, which asks, "Generally speaking, do you consider yourself as a Republican, a Democrat, an independent, or something else?" Based on previous research, the different wording is unlikely to influence our results. Although there is some evidence that in states that require voters to register with a partisan affiliation, state-level measures of partisanship differ slightly when the question stem asks what party respondents are registered with, national marginals for the different question wordings are almost identical (Finkel & Scarrow 1985). Furthermore, if this question wording does influence responses, asking which party respondents are registered with is advantageous because party registration is completely exogenous to current economic evaluations and purchasing decisions.

Our model of partisanship (the first stage regression) includes a battery of variables that capture respondents' demographic characteristics,⁷ political opinions and activities,⁸ group memberships,⁹ and media exposure. The media exposure variable warrants further discussion. The NCS asks respondents whether they have watched particular shows or channels during the previous week and whether they have listened to particular radio stations or programs in the previous week. For each of the 105 television programs and cable networks and the 124 radio programs and networks, we generated a "partisanship score" based on the percent of viewers/listeners who were Democrats (out of Democrats and Republicans). We then assigned each respondent a partisan media exposure rating based on the average partisanship score of all television and radio programs the individual encountered during the previous week. Thus, our model of partisanship includes long-term influences on partisanship (i.e., demographic variables and group membership) as well as political attitudes, political behaviors, and partisan media exposure. In addition to being theoretically sound, a variety of validation tests (reported in the Appendix) also show that our instrumented measure of partisanship is empirically sound.

A Partisan Economy?

In this section we seek to answer two questions. First, do Republicans consume more than Democrats? We saw in Figures 2 and 3 that Republicans consistently evaluated the economy more positively than Democrats in 2000 and 2001. If these differing economic perceptions

⁷Demographic variables include race, gender, age, education, marital status, income, religion, and region.

⁸Political variables include political (liberal-conservative) ideology, whether the respondent is pro-life, whether the respondent would volunteer for an environmental organization, whether the respondent considers him/herself an open minded or liberal, whether the respondent agrees that pornographic shops should be closed, and whether the respondent agrees that homosexuals should not be allowed to teach. Political activities include having ever written an elected official, having ever visited an elected official, and having ever participated in a local civic issue.

⁹Whether the respondent belongs to a business club, a union, a public fraternal order, a religious club, AARP, a veterans club, a country club, a health club, local government, a human rights group, or an environmental organization.

influence expenditure, we should see greater consumption among Republicans during all periods of the analysis. Second, do Republicans and Democrats' patterns of consumption change following the election? We outlined two mechanisms that would predict this pattern. After Bush enters the White House, we may observe a persistent change in how partisans consume, as both Democrats and Republicans view the economy through a new lens. Alternatively, we may observe a short-term change that dissipates after the election media blitz and post-election cheer or woe subsides.

To answer these questions, we examine five areas of consumer behavior: going to the movies, to family restaurants and steakhouses, to fast food restaurants, to the grocery store, and gasoline consumption. In 2000, these areas of spending accounted for nearly 25 percent of all consumer expenditure (Bureau of Labor Statistics).¹⁰ Thus, our measures tap a large portion of what consumers spend their money on.

We do not, however, expect partisanship to affect all spending equally. Some consumer behaviors are rooted more strongly than others in short term or contemporaneous considerations. We call these “flexible” purchases or expenditures. For example, the decision to go to a restaurant likely depends, in part, on an individual's current mood, schedule, and financial considerations. It is thus “flexible” spending where we expect to observe a partisan effect. These consumer decisions are most likely to reflect current economic considerations—which we have seen are influenced by partisanship—as well as any post election feelings of excitement or disappointment based on who occupies the White House. If we do not observe a partisan effect in these spending areas, we will have strong evidence that the economy is indeed exogenous to partisanship.

Other consumer behaviors, by contrast, are driven to a greater extent by long-term considerations, such as habit and need. Consumption of fuel offers an example of purchases

¹⁰Specifically, food, food away from home, gas and motor oil, and entertainment fees and admissions accounted for 13.6%, 5.6%, 3.4%, and 1.4% of total expenditure in 2000 (<http://www.bls.gov/cex/csxshare.htm>).

based on long-term considerations. Certainly, a spontaneously planned car trip would reflect short term influences and increase fuel expenditure, but most fuel consumption is likely consistent from week to week. We posit that for most people, the majority of their driving stems from highly routine behaviors that are primarily a function of need and habit.

Thus, spending can be viewed along a continuum from flexible to rigid purchases. The influence of elections and partisanship should be strongest for flexible spending. It would not be surprising if no effect exists for rigid spending. Although we suggest above that restaurant patronage is on the flexible side of spending and gasoline consumption is on the rigid side, we have no methodology for identifying exactly where various categories fall along this continuum. Our own priors tell us that movie attendance and restaurant patronage are more likely to be flexible spending areas and that grocery shopping and gasoline usage are more likely to be rigid spending areas. We thus present the results according to this classification scheme.

“Flexible” Spending

The first part of our analysis looks at three “flexible” spending areas: number of movies watched in a theater during the last 30 days, number of visits to a family restaurant or steak house during the last 30 days, and number of visits to a fast food restaurant in the last 30 days. The data come from the NCS described above. Because our dependent variables reflect the number of times respondents engaged in a particular behavior, we are interested in estimating whether partisanship influenced the number of times these “events” occurred. Thus, we estimate models suitable for event count data (King 1988). Specifically, we estimate negative binomial regression models.¹¹ We utilize negative binomial regression, as opposed

¹¹Although the underlying data for all variables reflect the number of times an event occurred, for some of the variables, the survey collapsed these numbers into larger categories. In each of these cases, we repeated the analysis using ordered logit models. In no cases do our conclusions about partisanship change with ordered logit estimation.

to Poisson Regression, because in each case, the dependent variables are over-dispersed (the variance exceeds the mean) (King 1989).¹² Our goal is to isolate the unique effect (if any) of partisanship. Thus, we include a variety of control variables that might influence consumer behavior. Controls include income level, education level, age, marital status, race, sex, religion, whether the respondent is pregnant, number of children, number of adults in the household, employment status, type of house, whether the respondent has a vacation home or time share, county size, and region of the country. Each model also includes our measure of partisanship, a dichotomous variable indicating the survey immediately following the election, a dichotomous variable for the survey beginning 6 months after the election, and the interaction between partisanship and each of these variables.¹³ The coefficient on the partisanship variable will indicate whether Democrats and Republicans consumed differently prior to the 2000 election. The interaction between partisanship and the two post-election dummy variables will indicate whether the relationship between partisanship and consumption changed immediate following the election and in the medium run after the election.

Table 1 presents the results for visits to the movies, family and steak restaurants, and fast food restaurants. The first row of coefficients provides information about the consumer patterns of Democrats and Republicans during the months prior to the 2000 election. Beginning in column 1 (Attend Movies), the negative and significant coefficient indicates that prior to the 2000 presidential election, Republicans were less likely than Democrats to go out to movie theaters. Looking at columns 2 and 3, we see the opposite relationship. Republicans were more likely than Democrats to eat out in both family/steak restaurants and fast food

¹²The positive and significant values of α in Tables 1 and 2 provide evidence of over-dispersion.

¹³Our pre-election survey was conducted between April and October of 2000. The post-election survey was conducted between October 2000 and April 2001. Since the outcome of the 2000 presidential election was not decided until December 13 when Al Gore conceded the election following the Supreme Court's December 12 ruling, our post election survey includes some interviews that actually took place prior to the election being decided. If this timing has any effect, it should reduce the observed influence of partisanship. The third survey was conducted between April 2001 and October 2001.

Table 1: The Effects of the 2000 Presidential Election on Partisan Consumer Behavior

	Attend Movies	Family & Steak Restaurants	Fast Food Restaurants
Partisanship	-0.139* (0.043)	0.055* (0.022)	0.037* (0.123)
Partisanship X Post Election	0.133* (0.063)	0.073* (0.031)	-0.006 (0.023)
Partisanship X 6 Mo. Post Election	-0.014 (0.056)	-0.005 (0.029)	-0.028 (0.020)
Post Election	-0.297* (0.129)	-0.128 (0.065)	-0.563* (0.047)
6 Months Post Election	0.076 (0.115)	0.059 (0.060)	-0.444* (0.042)
N	26,142	26,142	26,142
α	1.500 (0.040)	0.658 (0.009)	0.448 (0.008)

Negative binomial regression estimates with robust standard errors in parentheses. Control variables not shown. * = $p < .05$, two tailed tests

restaurants. The evidence that Republicans’ patronized restaurants more frequently than Democrats is consistent with Republicans’ higher levels of consumer confidence prior to the election. Importantly, the opposite finding for movie attendance shows that this pattern does not generalize to all consumer areas. Thus, among our “flexible” spending categories, the evidence is mixed regarding whether partisan induced economic evaluations influenced pre-election consumption.

The second row in the table shows the results for the interaction between partisanship and the survey immediately following the election. For movie attendance and family/steak restaurants (columns 1 and 2), the positive and statistically significant coefficient suggests that the influence of partisanship on these consumer behaviors increased immediately following the election. Specifically, either Democrats’ consumption decreased, Republicans’ consumption increased, or both. This pattern does not emerge, however for visits to fast food restaurants. It is possible that the amount typically spent at fast food restaurants is so small that the decision to go to fast food restaurants is driven more by habit than by

immediate considerations, such as who won the election. Similarly, the amount typically spent at fast food restaurants may be too little to be influenced by partisan perceptions of the economy. This is not to suggest that fast food restaurants are immune from financial considerations. But it may be the case that small habitual purchases, like fast food, are influenced by large shifts in economic perceptions—such as the onset of a recession—not more subtle shifts associated with who won or lost the election.

Moving down Table 1, the third row shows the results of the interaction between partisanship and the survey conducted 6 to 12 months after the election. Across all three spending areas, the relationship between partisanship and consumer behavior is not significantly different than prior to the election. This finding indicates that 6 to 12 months after the election, the partisan induced election effect that we observed for movie attendance and restaurant visits was gone. According to Figures 2 and 3, partisan perceptions of the economy actually diverged during this period. Thus, if partisan economic evaluations were driving spending, we should observe at least as strong an effect during this time period as the previous time period.

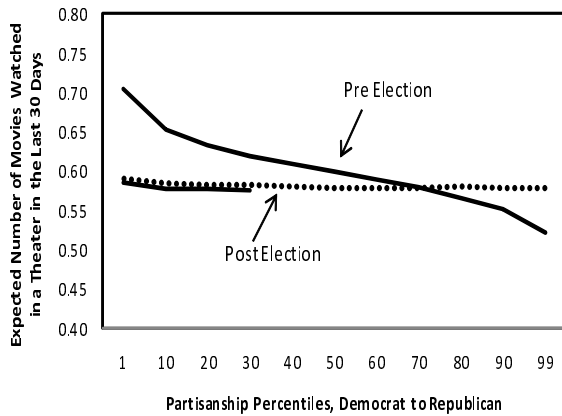
Figure 4 provides a more detailed look at these results. The plots in the left column each contain two lines. The solid line indicates the expected number of visits during the last 30 days to the movies, family restaurants/steakhouses, or fast food prior to the 2000 election, across various levels of partisanship. The first percentile corresponds with extreme Democrat. The 99th percentile corresponds with extreme Republican. The dotted line represents the expected behaviors in the months immediately following the election. A solid line under the dotted line indicates that the change in expected values from before to after the election was statistically significant ($p < .05$). In the right column, the solid line again represents expected values prior to the election. The dotted line now represents the expected change in the number of visits 6 to 12 months after the election. Thus, comparing across rows allows us to see how expected behavior changed for partisans from before to

immediately after the election (left column) and before to 6 to 12 months after the election (right column). All values were calculated with CLARIFY (King, Tomz & Wittenberg 2000, Tomz, Wittenberg & King 2001) using 1,000 simulations, holding continuous variables at their mean and dichotomous variables at their median.

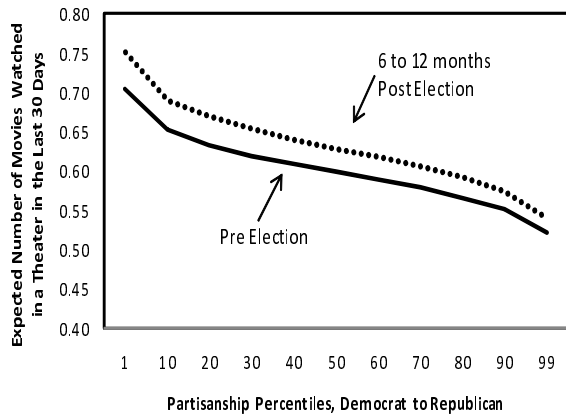
The upper left plot of Figure 4 shows the number of expected visits to a movie theater during the last 30 days for various partisan values prior to and after the 2000 election. Because the majority of respondents had not gone to see a movie during the previous 30 days, the solid line shows the expected number of visits to the theater, on average, is less than 1 for both Democrats and Republicans. Consistent with the results in Table 1, prior to the election, we expect Democrats to attend movies more often than Republicans. The dotted line in Figure 4 reflects the expected number of movies watched following the election. The solid line beneath the dotted line indicates the change was statistically significant ($p < .05$). Consistent with the significant interaction term in Table 3, Democrats and Republicans' movie watching did not change uniformly following the election. Democrats' visits to movie theaters declined significantly immediately following the election. Moderates and Republicans do not show a significant change.

The decrease in the expected number of movies watched was significant for the 30 percent most Democratic respondents. Looking at the 20th percentile, which according to the 2000 ANES would fall between Strong Democrat and Weak Democrat, the expected number of movies watched in a 30 day period fell by .05.¹⁴ Besides noting that this individual-level estimate is small, it is difficult to think about what a .05 drop in movie attendance means. We thus estimate what this value means for the population. Specifically, we estimate how many fewer movies were watched in the first 3 months after the election and what the loss in revenue would have been for the movie industry. Multiplying the estimates from the 20th percentile times 30 percent of the population predicts more than 3 million less movies

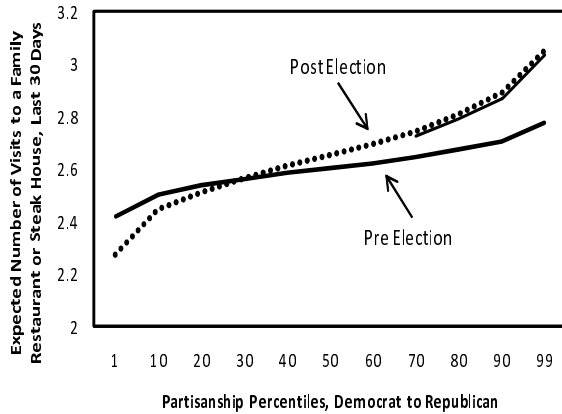
¹⁴In the 2000 ANES, just over 19 percent of respondents identified as "Strong Democrats."



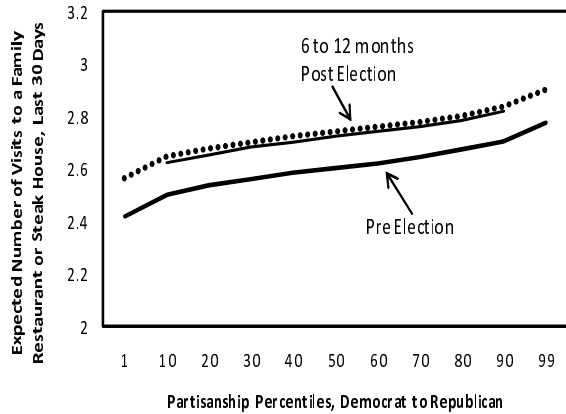
(a) Movie Attendance



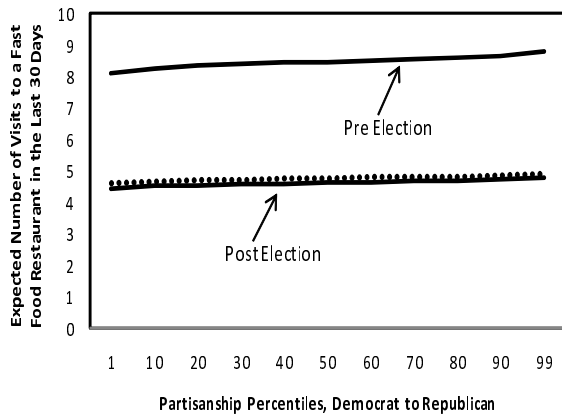
(b) Movie Attendance



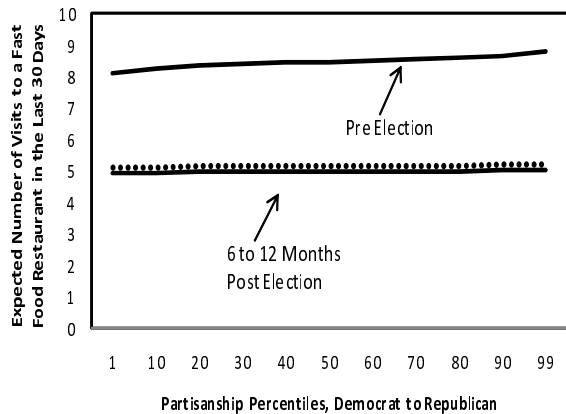
(c) Restaurant Visits



(d) Restaurant Visits



(e) Fast Food



(f) Fast Food

Figure 4: Expected Consumer Behavior Before and After the 2000 Presidential Election, by Partisanship. Note: Solid line under dotted line indicates a statistically significant change.

viewed following the election.¹⁵ We are 95 percent confident that the value is between 393,219 and 6,259,670. Multiplying these numbers times the average price of a movie in 2001 (\$5.65) gives an estimated range of between 6.6 million and 106 million dollars in lost revenue.¹⁶ To place this number in further context, the opening weekend gross revenue for *Harry Potter* (\$90.3 million) falls near the upper limit of our 95 percent confidence interval. We have likely underestimated the total effect, given that we did not include concessions, which constitute roughly 40 percent of theater revenue. Nevertheless, the total influence of the election on partisan movie watching, at its extreme, would probably be equivalent to an expected blockbuster having a bad opening weekend. This is an important result but not a massive one. It is also short lived. Looking to the right column, we see that 6 to 12 months after the election, for all partisan groups, expected movie attendance is statistically indistinguishable from pre-election patterns.

Looking down to the second row of the first column, we again see a post-election partisan effect. The solid line shows that prior to the election, we expect Republicans to have frequented family restaurants and steakhouses more often than Democrats. This tendency increases, however, after the election. The increase in the expected number of restaurant visits is statistically significant for the 30 percent most Republican respondents. We can again multiply the percentage of the adult population in 2000 times the expected values at the 20th percentile to generate an estimate of the total increase in restaurant visits that we can attribute to Republicans. Our best guess is that during the 3 months following the election, Republicans accounted for an increase of more than 130 million restaurant visits. We are 95 percent confident that the actual value falls between 41 million and 223 million. If we assume that the average person spends \$15.00 per restaurant visit, our results suggest that

¹⁵Using the values from the 20th percentile offers a more conservative estimate than if we took the average expected change across the range of significant values.

¹⁶Ticket price data from the National Association of Theater Owners (<http://www.natoonline.org/statisticstickets.htm>).

Bush winning the 2000 election led Republicans to spend an additional 124 to 668 million dollars at family restaurants and steakhouses. Moving to the right column, we again see that the relationship between partisanship and consumption has returned to pre-election levels. We expect a general increase in restaurant visits, but this increase is roughly the same across all partisan groups.¹⁷

The bottom row reports the expected number of visits to fast food restaurants. Several features stand out. First, notice the values on the y-axis are much higher than the previous plots. Americans go to fast food restaurants much more often than they go to the movies or family restaurants. Second, both immediately after and in the medium run, all partisan groups significantly reduce their visits to fast food restaurants.¹⁸ In 2001, the public reported visiting fast food restaurants less often than in 2000, but this pattern was consistent across partisan groups.¹⁹

“Rigid” Spending

We now turn to our categories of “rigid” spending, grocery shopping and fuel consumption. We expect minimal to no partisan effects among these spending categories. Our argument is not that these spending categories are completely rigid. Rather, relative to consumer behaviors like going to the movies or out to a restaurant, they are less dependent on short term considerations, and thus less influenced by current partisan considerations. During

¹⁷The increase in the expected number of restaurant visits from the second half of 2000 to the second half of 2001 is consistent with data from the *NPD Group* (a consumer and retail market research firm), showing “restaurant industry traffic” was higher in 2001 than 2000. Reported in the *Nation’s Restaurant News* (http://www.nrn.com/article.aspx?keyword=&menu_id=1418&id=352136).

¹⁸It is worth noting that the magnitude of this decrease is likely exaggerated by the scale of the variable. The second category ranges from 1 to 5 visits and the third category ranges from 6 to 13 visits. To generate the expected values, both of these were coded at their median. Thus, a drop from 6 to 5 fast food restaurant visits would be treated as a drop from 9.5 visits to 3 visits. The previous spending categories were not condenses like this, so this was not a problem.

¹⁹To the extent that McDonald’s revenues correspond with the rest of the fast food industry, this decrease is consistent with the fact that in 2001, McDonald’s sales growth fell 3 percent from 2000. (Crain’s Chicago Business, Oct. 6 2008, David Sterrett).

our period of analysis, the NCS asked three questions related to shopping for groceries, the number of times a respondent did a “major” food shop during the last four weeks, the number of times a respondent did a “fill-in” food shop during the last four weeks, and the number of times shopped in any supermarket during the last four weeks. Of these three questions, only “fill-in” food shop was asked in all three surveys. Thus, our analysis of grocery shopping is confined to this question. Our second area of “rigid” spending is gasoline consumption. Specifically, the question asks “what is the average number of gallons of gasoline or diesel fuel you buy each week?” Because the fuel question asks about a quantity purchased as opposed to the number of times an event occurred (such as going to a grocery store) we estimate the quantity purchased with an ordered logit model.

Table 2: The Effects of the 2000 Presidential Election on Partisan Consumer Behavior

	Grocery Trips	Gallons of Gasoline
Partisanship	-0.073* (0.019)	0.153* (0.042)
Partisanship X Post Election	0.074* (0.028)	-0.059 (0.061)
Partisanship X 6 Mo. Post Election	-0.053 (0.027)	0.020 (0.057)
Post Election	-0.217* (0.057)	0.149 (0.126)
6 Months Post Election	-0.119* (0.056)	0.037 (0.117)
N	24,945	25,788
α	0.580 (0.011)	-- --

Column one contains negative binomial regression estimates. Column two contains ordered logit estimates. Robust standard errors in parentheses. Control variables not shown.

* = $p < .05$, two tailed tests

Table 2 shows a surprising result. The interaction between partisanship and the survey immediately following the election is positive and statistically significant. This result is con-

sistent with the post-election partisan results we observed earlier. Two explanations present themselves. The question asks about “fill-in” shopping. It may be that we miscategorized these purchases and they should be considered “flexible.” Alternatively, the influence of elections on partisan purchasing may be more pervasive than we hypothesized. Unfortunately, our data do not allow us to draw distinct conclusions here. We do see, however, that consistent with earlier findings, six months after the election the partisan shift is no longer evident. We observe no partisan effect for gasoline consumption. Our results suggest that in 2000, Republicans purchased more gas and diesel than Democrats and that this pattern persisted in both periods of analysis following the election.

Across the five areas of consumption we analyzed, several notable patterns emerge. First, although Republicans showed higher economic evaluations than Democrats during all periods of our analysis, it is not the case that Republicans spend more across all spending domains. Our findings suggest that prior to the 2000 election, Democrats engaged in more movie watching and grocery shopping. The second notable finding is that partisan patterns of consumption are relatively stable. In three areas (movies, family restaurants/steakhouses, and groceries) we observed post election effects consistent with increased Republic (or decreased Democratic) consumption but 6 to 12 months after the election, pre-election behaviors reemerged.

Conclusions and Implications

A classic finding in research on voter behavior is that the economy moves elections. An assumption, often unstated, underlying this work is that the economy’s power to shape election outcomes is due, in large part, to the correspondence between the actual state of the economy and the economy as it is reflected in voters’ minds. This implies that the economy is exogenous to economic opinions and that economic opinions are untainted by political

considerations. Both of these implicit assumptions have come under attack. In particular, scholars have begun to document that economic opinions are shaped by partisanship, and that biases in partisan economic opinions may not cancel out in the aggregate.

We seek to contribute to this debate by examining the extent of partisan divergence in economic opinions, and the extent to which elections produce divergent outlooks, if they in fact exist. Moreover, consistent with research in macroeconomics, we posit that consumer opinions lead to actual economic outcomes. Focusing on consumer behavior, the single largest determinant of economic activity in the United States, we developed a model of partisan shoppers whose purchasing behavior is driven, in part, by their politically induced evaluations of macroeconomic conditions. We hypothesized that partisans engage in systematically different consumption patterns of everyday goods, depending on presidential election outcomes and whether their preferred party is in charge of economic policy.

To evaluate whether partisan influences on consumer sentiment translate into partisan differences in consumer behavior, we utilized aggregate surveys of economic opinions, as well as individual-level surveys conducted before and after the 2000 presidential election of 36,000 respondents who provide detailed data about recent consumer behavior. Our results show that Republicans had consistently more positive evaluations of the economy than Democrats throughout the period under consideration, and this partisan gap in evaluations became more pronounced in the aftermath of the 2000 election. Moreover, our analyses of consumption behavior before and after the election shows that—for some consumer decisions—elections indeed induce partisan divergence in how partisans spend their money, with the gap in spending between supporters of the winning and losing party increasing significantly in the aftermath of the election. Thus, we find that elections change consumption behaviors. At the same time, our results of the dynamics of consumer behavior show that partisan divergence in consumption is short-lived; that is, the effect of elections on how partisans spend their money is ephemeral and disappears less than a year after the election is over.

The results make several contributions. For one, they show that, while supporters of the President do not always see the economy in a more positive light than his opponents, elections jolt partisans into believing systematically more different things about the economy after the election than before it. Moreover, they establish unambiguously and for the first time with the help of individual level data that economic behavior can be politically motivated. These findings have implications for how we view the connection among the real economy, the subjective economy, and voter behavior. For one, they suggest that we question classic assumptions in economic and political behavior. These include, for example, the assumption that economic conditions are exogenous to political behavior, that the influence of partisanship is predominantly political in nature, and that economic behavior is unrelated to political considerations.

The reasons for our inability to unambiguously undermine these assumptions are mostly methodological and have to do with measurement and our ability to tease out competing mechanisms. Regarding the former, our evidence of partisan differences in consumption is based on survey data and thus subject to the usual caveats that come with such data. The primary disadvantage is that we do not have a direct measure of how much individuals spent on these particular activities. The lack of a direct expenditure measure poses two potential limitations. First, we must rely on individuals' recollection of their behavior. Second, even if individuals recall their behavior accurately, we do not know how much they spent doing the activity or on the product. Several factors, however, help mitigate these concerns.

To minimize respondent fatigue, the data are collected in several phases. In Phase I, face-to-face interviewers collect demographic data and data on media consumption. During the second part of Phase I respondents report, by filling out a questionnaire, whether they purchased and use specific products. In Phase II, typically conducted about eight weeks after the Phase I interview, interviewers collect and review with the respondent answers to the consumption questionnaire. The survey firm undertakes extensive validation procedures

in order to minimize error of actual consumption behavior. Survey response rates in the NCS are generally high (approximately 70 percent) and compare favorably with other widely used surveys.

Moreover, for the two restaurant questions we used in the analysis, the NCS first asks respondents about specific restaurants. The task of remembering a trip to a specific restaurant is much easier than trying to remember all restaurants visited in the last 30 days.²⁰ The NCS then combines answers from these individual questions into a summary measure of total restaurants visited. Second, although we expect these measures to be accurate, our research questions do not require that respondents recall their behaviors with perfect accuracy. Because we are interested in comparing consumer behavior among Republicans and Democrats, all we assume is that on average, Republicans and Democrats do not systematically remember their behaviors differently.

Finally, although knowing the exact amount spent would be ideal, we believe the assumption that the frequency of visits to restaurants, the theater, or the grocery store is a proxy for amount spent is rather innocuous. While it is possible to frequently visit a restaurant and only buy a soda or to go once and treat a large group, most of the time, patronage should correspond with expenditure. Furthermore, measuring actual behavior - going to the movies or to a restaurant - also carries advantages. Beyond providing at least some information about expenditure, this measure offers information about whether and how often individuals engaged in a specific physical act (e.g., going out to a restaurant). Finally, these variables are advantageous because we are able to go beyond measuring simply how much consumers may have spent but also distinguish among different kinds of spending categories.

While we are thus comfortable with the quality of the consumption data for the purposes of the analyses we report here, we can only infer, but not pinpoint directly, the causal mech-

²⁰The NCS lists 59 different family restaurants and steak houses plus an “other” category. For fast food restaurants, the survey lists 57 different fast food chains plus an “other” category.

anisms that underlie our results because the surveys do not furnish questions that would tap into respondents' evaluations of the national economy. However, to the extent that partisan opinions about the economy clearly diverged immediately after the 2000 election and continued to diverge significantly well into the year 2001 - per our aggregate results - the short-term partisan differences in consumption that faded by the second half of 2001 cannot be explained with these partisan differences in macroeconomic evaluations. If partisan differences in consumer confidence were the causal mechanism behind differences in consumption, then consumption patterns should be more strongly shaped by partisanship in fall 2001 than in spring 2001. This is clearly not the case; in fact, the opposite is true. We therefore suspect that the immediate aftermath of the 2000 election produced a short-term feel-good effect among Republicans, and drove Democrats to despair.

The findings also suggest several fruitful avenues for future research in this area. In particular, we would like to suggest that researchers continue to probe the non-political consequences of partisanship, and the ways in which election outcomes help to shape and rearrange what people think about the economy. On the one hand, the 2000 election outcome was unusually salient, perhaps making this a most likely case for partisan election effects. On the other hand, the difference between partisan economic evaluations was more than twice as large at the end of Bush's presidency than during the period of our analysis (Enns & McAvoy 2008). It is possible that partisan election effects on consumer behavior have become stronger with partisan polarization. Such a finding would carry particularly strong implications for the 2008 presidential election which was preceded by economic crisis and followed by massive government efforts to spawn economic recovery.

Appendix: Evaluating the Instrumented Measure of Partisanship

Our instrumented measure of partisanship contains theoretically desirable properties. Here we seek to evaluate the empirical qualities of the measure. Table 3 offers an indication of how well the variables in our first stage regression account for the variation in partisanship. Although we use the individual coefficients to estimate values of partisanship, the total number of variables in the model is too numerous to list, so we report p-values for block F-tests for the groups of variables listed above (with the exception of the p-value for media exposure, which coincides with a single variable). The block F-tests indicate that all variable groups are statistically significant. That is, the probability that each group of variables does *not* help explain partisanship is essentially zero. It is also worth noting that the R² reported in Table 3 suggests we account for nearly a third of the individual level variation in partisanship.²¹

Table 3: Model of Partisanship

Block of Coefficients	p-value for block F-tests
Media Exposure	0.000
Demographics	0.000
Group Membership	0.000
Political Issues & Activities	0.000
R ²	0.294
Adj. R ²	0.288
N	12,063

Note: Cells reflect block F-tests except for media exposure which corresponds to a single variable. In each case, the p-value represents the probability that the group of variables (or variable) does *not* help explain party identification.

Considering that our model of partisanship includes long-term influences on partisanship

²¹The explanatory power of our first stage regression is significantly larger than that reported in previous research employing Franklin's (1989) 2SAIV, and two to three times that of other prominent works that have relied on the 2SAIV methodology (e.g., Bartels 1994, Zaller 1992).

(i.e., demographic variables and group membership), political attitudes and behaviors, and partisan media exposure, the results of Table 3 are reassuring and suggest that the model of partisanship is theoretically and empirically sound. Yet, given the importance of partisanship for our theoretical expectations, we want to further ensure that our use of 2SAIV produces a valid measure of party identification. Since we have self-reported partisanship in 2001, our strategy is to see how well our instrumented measure of partisanship “recovers” self-reported partisanship. That is, in 2001, what percent of our instrumented Democrats and Republicans actually self-identify as Democrats and Republicans?

Table 4 presents the self-reported partisan composition for various values of our instrumented measure of partisanship. The table cells report the percentage of self-identified partisans that corresponds with the most partisan (according to the instrumented measure of partisanship) 10 and 33 percent of respondents. The first column shows that in the 2001 surveys, coding the 10 percent most Democratic respondents (according to our instrumented measure of partisanship) as Democrats correctly classifies the partisanship of 79 percent of these respondents. We would only misclassify 5 percent as Republicans. Column 2 shows that our instrumented partisan measure is even more accurate for Republicans. Coding the 10 percent most Republican (according to our instrumented measure) as Republicans would correctly recover the partisanship of 88 percent of these respondents.

Table 4: Percent of Partisan Identifiers Correctly Classified by our Instrumented Measure of Partisanship

Self-declared Partisanship	Instrumented Partisanship			
	10% most Democratic	10% most Republican	33% most Democratic	33% most Republican
Democrat	79.27%	3.98%	67.42%	12.64%
Independent	15.42	7.79	19.17	12.96
Republican	5.31	88.23	13.41	74.40
N	1,206	1,206	3,981	3,981

Note: Cells reflect the distribution of self-declared partisans within various extremes of our instrumented measure of partisanship.

Not surprisingly, our predictive accuracy declines if we divide our instrumented measure of partisanship into thirds. Yet our measure of partisanship still performs well. Of the 3,981 respondents classified as Democrats, 67 percent self-identified as Democrats in the survey. For Republicans, the corresponding value is 74 percent. Furthermore, political surveys, such as the American National Election Study, typically probe as to whether independents lean toward one party or the other. Given that the NCS did not probe independents, it is not surprising that our instrumented measure of partisanship, which is continuous, predicts some self-identified independents are partisans. We strongly suspect that some, and perhaps most, of these independents would have identified as partisan leaners had the option been available. Of course, we acknowledge those who self-identify with the opposite party as pure errors. For both Democrats and Republicans, we would fully misclassify only 12 to 13 percent of respondents.

At face value, the predictive power of our partisan measure is impressive, considering that the self-reported partisan values we are trying to predict are liable to contain some measurement error. Thus, even a perfect instrument of partisanship would not fully recover self-declared partisanship. To illustrate this point we use the panel component of the 2000 National Annenberg Election Study (NAES). Our interest is how closely respondents' self-declared partisanship corresponds across the two waves of the panel.²² In other words, how well would we predict self-reported partisanship by knowing the same respondent's reported partisanship approximately 4 months later?²³ The percentage correctly classified provides a conservative benchmark for our instrumented measure of partisanship. It is hard to imagine a better predictor of individual's reported partisanship than the *same* individual's reported partisanship just a few months later. Of the 2,034 Republicans in the second wave of the 2000 NAES panel, 86.35 percent identified as Republicans in the first wave

²²The median time interval between interviews was 114 days and the mean interval was 136.5 days.

²³The specific question, "Generally speaking, do you usually think of yourself as a Republican, a Democrat, an independent or something else?" corresponds with the panel variables cV01 and rV01.

of the panel. Of the 2,020 Democrats in the second wave of the panel, 84.65 offered the same response in the first wave of the panel.²⁴ These values are in between the percent correctly classified by our instrumented measure of partisanship in the first two columns of Table 4. In other words, at the tenth percentile, our instrumented measure of partisanship recovers self-reported partisanship as accurately as knowing that *same* person's self-reported partisanship just a few months later. This result also suggests that the 67 and 74 percent accuracy reported in columns 3 and 4 should be compared to a benchmark of approximately 85 percent, not 100 percent. The combined evidence suggests that 2SAIV worked exactly as expected.

²⁴We obtain similar results comparing respondents in the 2000 and 2002 waves of the ANES panel study. Specifically, if we guessed partisanship in 2000 based on the respondent's partisanship in 2002, we would correctly classify 82.46 percent of Republicans and 87.80 of Democrats. We must keep in mind that approximately 1/3 of respondents failed to complete the second wave of the ANES panel. This attrition rate likely overestimates partisan stability because those most interested in politics are most likely to stay in the panel (e.g., Bartels 1999).

References

- Acemoglu, Daron & Andrew Scott. 1994. "Consumer Confidence and Rational Expectations: Are Agents' Beliefs Consistent With the Theory?" *Economic Journal* 104:1–19.
- Althaus, Scott L. 1998. "Information Effects in Collective Preferences." *American Political Science Review* 92:545–558.
- Anderson, Christopher J. 2007. "The End of Economic Voting? Contingency Dilemmas and the limits of Democratic Accountability." *Annual Review of Political Science* 10:271–296.
- Bartels, Larry. 1996. "Uninformed Voters: Information Effects in Presidential Elections." *American Journal of Political Science* 40:194–230.
- Bartels, Larry. 1999. "Panel Effects in the American National Election Studies." *Political Analysis* 8:1–20.
- Campbell, Angus, Philip E. Converse, Warren E. Miller & Donald E. Stokes. 1960. *The American Voter*. New York: Wiley.
- Campbell, Angus, Philip E. Converse, Warren E. Miller & Donald E. Stokes. 1966. *Elections and the Political Order*. New York: Wiley.
- Carroll, Christopher. D., Jeffrey C. Fuhrer & David W. Wilcox. 1994. "Does Consumer Sentiment Forecast Household Spending? If so, Why?" *American Economic Review* 84:1397–1408.
- Craig, Stephen C., Michael D. Martinez, Jason Gainous & James G. Kane. 2000. "Winners, Losers, and the Election Context: Voter Responses to the 2000 Presidential Election." *Political Research Quarterly* 59:579–592.
- Delorme Jr, Charles D., David R. Kamerschen & Lisa F. Voeks. 2001. "Consumer Confidence and Rational Expectations in the United States Compared with the United Kingdom." *Applied Economics* 33:863–869.
- Duch, Raymond M., Harvey D. Palmer & Christopher J. Anderson. 2000. "Heterogeneity in Perceptions of National Economic Conditions." *American Journal of Political Science* 44:635–652.
- Enns, Peter K. & Gregory E. McAvoy. 2008. "The Role of Partisanship in Aggregate Opinion." Paper presented at the 2008 Annual Meeting of the American Political Science Association.
- Eppright, David R., Nestor M. Arguea & William L. Huth. 1998. "Aggregate Consumer Expectation Indexes as Indicators of Future Consumer Expenditures." *Journal of Economic Psychology* 19:215–235.

- Evans, Geoffrey & Mark Pickup. 2007. "Endogenizing the Economy: The Political Conditioning of the 2004 US Presidential Electin." Paper presented at the Midwest Political Science Association Annual Meeting.
- Evans, Geoffrey & Robert Anderson. 2006. "The Political Conditioning of Economic Perceptions." *Journal of Politics* 68:194–207.
- Finkel, Steven E. & Howard A. Scarrow. 1985. "Party Identification and Party Enrollment: The Difference and the Consequences." *Journal of Politics* 47:620–642.
- Fiorina, Morris P. 1981. *Retrospective Voting in American National Elections*. New Haven: Yale University Press.
- Franklin, Charles H. 1984. "Issue Preferences and the Evolution of Party Identification." *American Journal of Political Science* 28:459–478.
- Franklin, Charles H. 1989. "Estimation across data sets: Two-stage auxillary instrumental variables estimation (2SAIV)." *Political Analysis* 1:1–24.
- Franklin, Charles H. & John E. Jackson. 1983. "The Dynamics of Party Identification." *American Political Science Review* 77:957–973.
- Fuhrer, Jeffrey C. 1988. "On the Information Content of Consumer Survey Expectations." *Review of Economics and Statistics* 70:140–144.
- Fuhrer, Jeffrey C. 1993. "What Role Does Consumer Sentiment Play in the U.S. Macroeconomy?" *New England Economic Review* pp. 32–44.
- Gerber, Alan S. & Gregory A. Huber. N.d. "Partisanship and Economic Behavior: Do partisan differences in economic forecasts predict real economic behavior?" *American Political Science Review*. Forthcoming.
- Ginsberg, Benjamin & Robert Weissberg. 1978. "Elections and the Mobilization of Popular Support." *American Journal of Political Science* 22:31–55.
- Goodhart, Charles A.E. & R.J. Bhansali. 1970. "Political Economy." *Political Studies* 18:43–106.
- Green, Donald, Bradley Palmquist & Eric Schickler. 2002. *Partisan Hearts and Minds*. New Haven, Conn.: Yale University Press.
- Haller, H. B., Norpoth & H. and. 1994. "Let the Good Times Roll: The Economic Expectations of American Voters." *American Journal of Political Science* 999:999.
- Hess, Robert & Judith Torney. 1967. *The Development of Political Attitudes in Children*. Chicago: Aldine.

- Hibbs, Douglas A. & Jr. 1987. *The American Political Economy: Macroeconomics and Electoral Politics in the United States*. Cambridge, MA: Harvard University Press.
- Hymans, Saul. 1970. "Consumer Durable Spending: Explanation and Prediction." *Brookings Papers on Economic Activity* 2:173–199.
- Katona, George. 1974. "Psychology and Consumer Economics." *Journal of Consumer Research* 1:1–8.
- Katona, George. 1975. *Psychological Economics*. New York: Elsevier.
- King, Gary. 1988. "Statistical Models for Political Science Event Counts: Bias in Conventional Procedures and Evidence for the Exponential Poisson Regression Model." *American Journal of Political Science* 32:838–863.
- King, Gary. 1989. "Variance Specification in Event Count Models: From Restrictive Assumptions to a Generalized Estimator." *American Journal of Political Science* 33:762–784.
- King, Gary, Michael Tomz & Jason Wittenberg. 2000. "Making the Most of Statistical Analyses: Improving Interpretation and Presentation." *American Journal of Political Science* 44:347–361.
- Kinsey, Jean & Michael I. Collins. 1991. The Consumer Sentiment Index: Rational Expectations and Behaviour. In *Enhancing Consumer Choice*, ed. R.N. Mayor. Proceedings of the Second International Conference on Research in the Consumer Interest.
- Kramer, Gerald H. 1971. "Short-Term Fluctuations in U.S. Voting Behavior, 1896-1964." *The American Political Science Review* 65:131–143.
- Kramer, Gerald H. 1983. "The Ecological Fallacy Revisited: Aggregate versus Individual Level Findings on Economics and Elections and Sociotropic Voting." *American Political Science Review* 77:92–111.
- Ledgerwood, Alison, Ido Liviatan & Peter J. Carnevale. 2007. "Group-Identity Completion and the Symbolic Value of Property." *Psychological Science* 18:873–878.
- Lewis-Beck, Michael S., Richard Nadeau & Angelo Elias. 2008. "Economics, Party, and the Vote: Causality Issues and Panel Data." *American Journal of Political Science* 52:84–95.
- MacKuen, Michael B., Robert S. Erikson & James A. Stimson. 1992. "Peasants or Bankers: The American Electorate and the U.S. Economy." *American Political Science Review* 86:597–611.
- Matsusaka, John G. & Argia M. Sbordone. 1995. "Consumer Confidence and Economic Fluctuation." *Economic Inquiry* 33:296–318.

- Mueller, Eva. 1963. "Ten Years of Consumer Attitude Surveys: Their Forecasting Record." *Journal of the American Statistical Association* 59:899–917.
- O'Shaughnessy, John. 1992. *Explaining Buyer Behavior: Central Concepts and Philosophy of Science*. New York: Oxford University Press.
- Page, Benjamin I. & Robert Y. Shapiro. 1992. *The Rational Public: Fifty Years of Trends in Americans' Policy Preferences*. Chicago: University of Chicago Press.
- Regan, Dennis T. & Martin Kilduff. 1998. "Optimism about Elections: Dissonance Reduction at the Ballot Box." *Political Psychology* 9:101–107.
- Schiffman, Leon G. & Leslie L. Kanuk. 2000. *Consumer Behavior*. 7 ed. Upper Saddle River, NJ: Prentice Hall.
- Stigler, George J. 1973. "General Economic Conditions and National Elections." *The American Economic Review* 63:160–167.
- Tibbits, Clark. 1931. "Majority Votes and the Business Cycle." *American Journal of Sociology* 36:596–606.
- Tomz, Michael, Jason Wittenberg & Gary King. 2001. *CLARIFY: Software for Interpreting and Presenting Statistical Results. Version 2.1. Jan. 5, 2003, <http://gking.harvard.edu>*. Cambridge, MA: Harvard University.
- Wilcox, Nathaniel & Christopher Wlezien. 1996. "The Contamination of Responses to Survey Items: Economic Perceptions and Political Judgments." *Political Analysis* 5:181–213.
- Wittman, Donald. 1989. "Why Democracies are Efficient." *Journal of Political Economy* 97:1395–1424.
- Wlezien, Christopher, Mark Franklin & Daniel Twiggs. 1997. "Economic Perceptions and Vote Choice: Disentangling the Endogeneity." *Political Behavior* 89:7–17.