Looking to the Future: A Better Way to Study Prospective Economic Voting

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Abstract

The study of prospective economic voting has been plagued by inconsistent results. In this manuscript, we identify a fundamental problem with the primary way in which prospective economic evaluations have been measured in prior studies, and, equally importantly, also offer a solution that we hope will push the study of prospective economic voting in exciting new directions in the future. More specifically, we argue that the standard prospective economic expectation survey question - “how will the economy perform over the next 12 months?” - contains an unacceptably large degree of measurement error. Since respondents’ beliefs about the economic future likely depend in part on who wins the upcoming election, existing work utilizing pre-election surveys is problematic because we can not know which potential economic future respondents are thinking of when they answer this standard question. Our solution turns to Downs’ (1957) original formulation of prospective voting, which calls for eliciting prospective economic evaluations conditioning on which party wins the election. Using pre-election survey data from the 2008 American and Ghanaian elections, we show that the majority of voters do believe that future economic conditions will differ based on which party wins office in the upcoming election. Similar findings in both an advanced wealthy democracy and a poor patronage democracy give added weight to the manuscript’s concluding recommendation: studies designed to analyze prospective economic voting should employ conditional prospective economic evaluation questions and choice-specific econometric models.

Keywords: Prospective Economic Voting, Measurement Error, Survey Methodology, Simulations, Ghana, USA, Vote Choice
By our count there have been over 50 published articles in the last 20 years that offer an empirical test of the theory of prospective economic voting. In its most general sense, this theory asserts that voters’ beliefs about the future performance of the economy influence their vote choices. While a healthy proportion of these studies have analyzed prospective economic voting in the United States, studies can be found around the globe in countries as diverse as Hungary Harper (2000), Taiwan Hsieh, Lacy and Niou (1998), Turkey Hazama (2006) and Ghana Youde (2005). Somewhat disappointingly, however, the results of these studies are far from consistent. Many studies find support for prospective voting.\(^1\) Other studies falsify the prospective voting hypothesis.\(^2\) Still others find some support for prospective voting, but either claim that it is much weaker than retrospective economic voting (the theory that citizens reward or punish the incumbent government for past economic performance) or report mixed results across different elections and/or countries.\(^3\)

Unfortunately, and perhaps the reason why the extant literature is all over the place, the standard question used to study prospective economic voting – typically, some version of “how do you think the economy will perform over the next 12 months?” is seriously flawed. The purpose of this manuscript, therefore, is both to highlight why the question is flawed and to propose a solution. To do so, we begin by briefly discussing theories of prospective voting and why the standard economic expectations question poses such a problem for empirical tests of these theories. Simply put, many respondents will have different impressions about the state of the economy 12 months in the future depending on who wins the current election. If the typical prospective economic evaluation question is asked in a pre-election survey,


then we do not know on which candidate’s potential victory the respondent is conditioning her answer. Indeed, we identify seven potential “response regimes”, which we define as the set of rules that respondents may using in order to respond to the standard economic expectations survey question. The existence of these varied response regimes opens up the potential for serious measurement error in estimating the effect of prospective economic evaluations on vote choice. With this in mind, we propose an alternative question which resolves this problem by explicitly instructing respondents as to which response regime to use in answering the survey question. More specifically, and in line with Downs (1957), we propose that respondents be asked candidate-specific questions regarding prospective economic evaluations that can then be analyzed using choice-specific econometric models.

Moving beyond theoretical arguments, we further illustrate the validity of our critique by drawing upon a survey experiment that we designed for the 2008 American National Election Study (ANES) and an original 2008 election survey in Ghana. These studies – the first studies of which we are aware to ask the types of conditional economic evaluation questions we propose as a solution to the prospective economic voting problem – demonstrate that the beliefs of the majority of respondents in these two countries about the future state of the economy are indeed conditional on which presidential candidate wins the election. We conclude the manuscript by advocating that pre-election surveys collect data on how survey respondents believe the economy will perform in the future conditional on different candidates (or parties) being in office following the election, which we believe will not only allow us to begin truly testing prospective economic voting hypotheses, but will also inspire many new and interesting research questions.
1 Prospective Voting: Theory and Practice

1.1 Prospective Economic Voting

The standard prospective economic hypothesis tested in the literature is that those expecting the economy to improve in the future will be more likely to support the incumbent party than those who believe the economy is going to get worse. The theoretical origins of this hypothesis lie in work by Key and Fiorina on economic voting. The basic claim presented by Key 1966, and clarified and popularized by Fiorina 1981, is that voters reward or punish incumbent politicians based the health of the economy. Key and Fiorina further assert that voters' evaluations of economic conditions are retrospective; voters evaluate incumbents based on recent economic conditions. While testing this 'retrospective incumbent hypothesis', numerous scholars have also evaluated a slightly different claim involving voters' expectations about the future performance of the economy. The logic behind this 'prospective incumbent hypothesis' is that expectations about the short-term economic future offer a more accurate assessment of an incumbent’s economic performance than do evaluations of the recent economic past MacKuen, Erikson and Stimson (1992).

As Fiorina notes, however, the ‘incumbent hypothesis’ strain of economic voting differs in important ways from the model presented in Downs 1957. For Downs, voters are interested in future utility - they are prospectively oriented - and select the candidate whom they believe will provide them with the greatest utility in the future. In this model, voters form expectations about the likely state of the economy conditional on each different candidate winning the election, which in turn contributes to the overall utility a voter is likely to derive from a given candidate winning the election.

The Downsian approach to economic voting therefore requires a very different analytic approach than the incumbency centered model. In particular, the Downsian model requires
consideration of both “alternative-specific” and “respondent-specific” factors. Alternative-specific characteristics are the features of individual voters, such as income, race, and age, that are related to vote choice. Alternative-specific characteristics, on the other hand, are features of the different candidates which may influence voters’ choices. Voters may tend to prefer, for example, candidates with more experience to candidates with less. The Downsian model thus encourages political scientists to investigate which respondent and candidate-specific factors govern vote-choice. Do citizens weigh candidates’ expected economic performance heavily, or do they care more about candidates’ expected foreign policy performance? And do either of these factors weigh more heavily on vote choice than, for example, a voter’s age or socio-economic status? Since expectations about economic performance under the different candidates is a candidate-specific factor, the standard economic expectations question - which asks about the expected state of the economy in the future without conditioning on which party will win the election - is not appropriate for testing Downs’ model.

Nor, as it turns out, is the standard economic expectations question appropriate for assessing the empirical support for the traditional ‘prospective incumbent hypothesis’, which has been the subject of the vast majority of the empirical literature dedicated to the study of prospective voting. As noted earlier in this section, the prospective incumbency hypothesis

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4Alternative-specific is sometimes called choice-specific and we use them interchangeably. For the particular research question at hand, the alternative or choice is either a candidate or a party depending on the electoral system. See as well Alvarez and Nagler 1995.

5Some studies of prospective economic voting have relied on a question that asks respondents which party or candidate they think would be best at handling the economy. This type of question was included on the American National Election Study until the 1970s and is also found in Hsieh et al. 1998 in a Taiwanese National Election Study, Shaefer et al. 2008 and Shamir 1999 in Israeli National Election Studies, and Malhotra 2007 using data from the Washington Post. From our perspective, this question improves upon the standard economic expectations question, but is still inferior to truly choice specific questions. The question is most useful in a two party context, as it at least provides a ranking of the parties, although even here we still lack the more detailed information about the “range” between evaluations of the economy under each party, which choice specific questions can provide (e.g. is party A “improve” and party B “stay the same” the same as party A “improve” and party B “worsen”?)). However, in a multiparty context, we lose even more information because we have only a ranking of one party to the others, but no ranking between the others.

6Although see Tucker 2006 for a different way of think about prospective voting that focuses more on a
asserts that voters use information about where the economy is headed to judge the quality of the current incumbent officeholder. Testing this hypothesis using the standard economic expectations question assumes, however, that citizens’ beliefs about the economic future are unrelated to their beliefs about the outcome of the next election. In reality, citizens’ may adjust their answer to the standard prospective economic evaluation question depending on which candidate will likely win the election, take office, and control economic policy. Given that citizens believe the election outcome can have an effect on the state of the economy and that at least some voters may be conditioning their answers on something besides an incumbent victory, it is no longer possible to claim that an assessment of the economy over the next 12 months should be related to the vote for the incumbent party. Nor is it legitimate to claim that evidence falsifying this hypothesis tells us anything useful about whether prospective economic voting actually is occurring. Accordingly, we now consider how respondents’ beliefs about how election outcomes may relate to their prospective economic party’s type than incumbency status.
evaluations.

1.2 Response Regimes

In this section, we present seven different plausible “response regimes” that might guide an individual’s assessment of the standard prospective economic evaluation question: “how do you think the economy will perform over the next 12 months?”.

We begin with some simple heuristics that voters might use to answer this question:

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7 Post-election surveys are another matter entirely, although equally problematic for the standard prospective economic voting question. In a post-election survey, the winner of the election is - for the most part - known. That means that when respondents are asked for their beliefs about the state of the economy 12 months into the future, they are all likely conditioning on the commonly known winner of the election. In political systems characterized by post-election coalition formation, a pre-coalition formation survey would be similar to what we call a pre-election survey, while a post-coalition formation survey would be similar to what we call a post-election survey. We might legitimately expect supporters of the party that has won the election to believe the economy will look better in 12 months than supporters of the party (parties) that have lost the election. If one evaluates the standard prospective economic voting hypothesis - i.e. testing for a positive relationship between the vote for the incumbent party and a belief that the economy will improve in the next 12 months - we should expect to find empirical support for this hypothesis when the incumbent party is reelected but not when the incumbent party is voted out of office. This (false) finding will of course have nothing whatsoever to do with whether people were engaged in prospective economic voting, and everything to do with the fact that since the winner of the election is now known, supporters of that party now think the economy is going to perform better than supporters of the losing party. If we are at all correct that people who have voted for the winning party are likely to have a more upbeat view of the future state of the economy than people who voted for losing parties, empirical tests of prospective voting using the standard prospective economic evaluation in post-election surveys should therefore not be interpreted as telling us anything about whether people are engaged in prospective economic voting, and rather instead treated as an artifact of the way people are likely to answer a question about the state of economy in the next 12 months once they know whether their party has won the election. To test this proposition, we examined results (not shown, but which we would be happy to add as an online appendix if reviewers or the editors so desired) from three Polish elections where (1) the incumbent parties were defeated and (2) where the standard prospective economic voting question was asked in a post-election survey. Exactly as anticipated, there was a strong positive relationship between thinking the economy would improve in the next 12 months and voting for winning parties, as well as a strong positive relationship between thinking the economy would get worse in the next 12 months and voting for the losing incumbent parties. Cast in the traditional framework, such results would be used to claim voters were not engaging in prospective economic voting, because no relationship between thinking the economy would improve in the next 12 months and voting for the incumbent party could be found. From our perspective, such a conclusion would be completely unwarranted, because the data are simply picking up the fact that supporters of all parties now know who has the won the election, and can condition their evaluations of the economy in the next 12 months accordingly.

8 This may not be a collectively exhaustive set of response regimes, but these seem most likely and are sufficient for demonstrating the problem.
• She may assume that the incumbent will win the election.

• She may assume that her preferred candidate will win the election.

• She may assume that a randomly chosen candidate will win the election (e.g., the first candidate that pops into her head).⁹

Of course, we can also consider more “rationally” motivated response regimes where respondents take account of available information about the likely winner of the election:

• She may assume that the leading candidate in the polls is going to win the election. We can conceive of two approaches to identifying the leading candidate. The first assumes respondents share common beliefs about the leading candidate, where every voter knows precisely who is leading. We could also assume heterogeneous beliefs about the identity of the leading candidate.¹⁰

• She may employ a weighted average, whereby she conditions on the likelihood of each candidate winning the election. Again, we can consider common beliefs and heterogeneous beliefs about the likelihood of each candidate winning the election.

Taken together, we have seven potential response regimes. Provided at least some respondents have different beliefs about the likely state of the economy based on different potential election outcomes, then it should be obvious that an individual can in fact give very different answers to the standard economic expectations question depending on what response regime she is employing. Further, the use of particular response regimes may vary over

⁹See for example Zaller (1992).
¹⁰Heterogenous beliefs could be generated by a variety of different mechanisms: through people paying attention to different polls; through large numbers of people not paying attention to the election (and thus having only a vague idea of who the leading candidate is); or through a generally ‘low information’ political context such as a country where polling is underdeveloped, nonexistent, or extremely biased and not trusted by citizens.
elections or countries. It therefore follows that both aggregate distributions of responses to economic expectations questions and, ultimately, assessments of empirical support for prospective economic voting hypotheses can vary based on the response regime employed by survey respondents.\textsuperscript{11} While we believe this point ought to be intuitive, in Appendix A we use simulations to demonstrate theoretically that (1) different response regimes can indeed lead to very different aggregate survey responses (e.g., how many people say the economy will improve, stay the same, or worsen), and (2) the level of empirical support for the impact of prospective economic evaluations on vote choice that a typical study would report varies over response regimes, all the while holding constant each individual’s beliefs about the future performance of the economy conditional on who wins the election and the relationship between that belief and their vote choice. In other words, if you change the way respondents answer the standard prospective economic evaluation question, you can completely change the results of the study. And since we ultimately do not know what response regimes survey respondents use in answering these questions, the implications for how we interpret any results presented by such studies are troubling.

\textsuperscript{11}Moreover, most of these regimes are completely ill-suited for testing the standard prospective incumbent hypothesis. For example, if voters are using the leading candidate response regime and an opposition candidate is currently leading, we know that voters are answering the economic expectations question on the assumption that the incumbent is going to lose and that future economic conditions will depend on the economic competence of this opposition candidate. If we then find that there is no relationship between positive future economic expectations and voting for the incumbent, should this falsify the prospective economic voting theory? Of course not. It may very well be that people expected the economy to decline if the incumbent stayed in power and therefore voted against the incumbent, which is precisely the logic that motivates the “incumbent hypothesis”. Despite this being the case, though, most studies using a traditional economic expectations survey question would (falsely) conclude that prospective economic voting did not occur because there was no relationship between thinking economic conditions would improve in the next 12 months and voting for the incumbent.
2 A Better Way to Study Prospective Voting

With these concerns identified, we now propose a solution. Our central argument is that voters’ beliefs about future economic performance will depend on which party controls the government in the future. If this is indeed the case, the standard economic expectations question is inadequate because in essence it forces voters to report beliefs about the economic future without specifying the electoral outcome on which they are conditioning these beliefs.

The proposed solution is therefore straightforward. In order to identify the impact that beliefs about future economic conditions have on vote choice, researchers need to directly inquire about respondents’ party-conditional economic expectations. For example, a pre-election survey conducted before a US presidential election should include the following two questions:

“Would you say that in the next 12 months, if the Democratic candidate wins the presidential election, the economy in the country as a whole will get MUCH BETTER, SOMewhat BETTER, stay ABOUT THE SAME, or get SOMEWHAT WORSE, or get MUCH WORSE?”

And then one should separately ask:

“Would you say that in the next 12 months, if the Republican candidate wins the presidential election, the economy in the country as a whole will get MUCH BETTER, SOMewhat BETTER, stay ABOUT THE SAME, or get SOMEWHAT WORSE, or get MUCH WORSE?”

Responses to these questions can be used to model prospective economic evaluations as a choice-specific feature of vote choice. This approach allows us to estimate the relative impact of beliefs about parties’ perceived economic competence (in other words, how well the economy will perform if a particular party is in power relative to other “party-specific”
and “respondent-specific” characteristics). Econometric models that allow prospective economic evaluations to be modeled as party-specific traits have been long available, such as choice-specific conditional logit McFadden (1974) and probit Hausman and Wise (1978). The good news is, then, once the proper data is collected, we already have the econometric models necessary to analyze it.

3 Do Voters Condition Prospective Economic Evaluations on Election Results? Evidence from the 2008 American and Ghanaian National Elections

Of course, all of this only matters if we think voters’ beliefs about the future state of the economy are indeed conditional on expectations about election results. Demonstrating why exactly respondents might believe this is beyond the scope of this article. It could be that voters genuinely think that one party will do a better job managing the economy than another party. It could also be the case that respondents anticipate that a victory by one candidate or another could lead to specific, differentiable, patterns of economic behavior, as Gerber and Huber (2009) demonstrate. Or it could simply be that voters project their preference for one party (or candidate) onto their beliefs about how the economy will perform under

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12 The ultimate extension of our approach would be to ask voters to condition on all possible scenarios across all relevant political institutions. For example, whether the economy would be worse, better or about the same if Democrats hold the presidency while Republicans control Congress, or whether it would be worse, better or about the same if a Republican held the presidency and the Senate with Democrats controlling the house. Considering various formations of coalition governments in parliamentary system would also follow a similar pattern. Unfortunately, as the number of iterations of control of power increases, asking an economic expectations question conditional on each possible outcome will become prohibitive, both because of the cost in survey questions and respondent time, and because at some point it is unrealistic to think that respondents will have such finely tuned expectations about economic performance in the future. Thus one important responsibility of the analyst will be to correctly balance the number of conditional questions between achieving the best range of coverage without diluting the quality of the answers. In most cases we suspect this will involve simply conditioning on each of the major contenders for office - be that the presidency or post of prime minister - potentially winning the election, but the final decisions will need to be made on a case by case basis.
the watch of that party (or candidate), otherwise known as the “halo effect”.\textsuperscript{13} Regardless of which mechanism is at work, so long as voters’ beliefs about the future state of the economy are conditional on which party wins a given election, then the standard prospective economic evaluation question has the potential to be fraught with measurement error for the reasons we have laid out previously.\textsuperscript{14}

The final step we need to take to demonstrate the problems associated with using this standard method of analysis in the study of prospective economic voting is to show that voters do indeed condition their expectations of the future state of the economy on the outcome of important elections. To this end, we report findings on party-specific economic evaluations questions from two 2008 surveys in the United States and Ghana. By showing that respondents do believe that the future state of the economy will be different depending on the office holder in two very diverse settings – one venerable, established democracy and one much newer West African democracy – we hope to convince readers of the importance of our argument for the study of prospective economic voting cross-nationally.

### 3.1 Data

Data from the United States are available thanks to the American National Election Studies’ (ANES) new policy of enabling users of the study to propose questions. Our candidate-specific prospective economic evaluations questions were added to the 2008 pre-election wave of the ANES via this process. The ANES principal investigators chose to randomly assign our new questions (one conditioning on an Obama victory and one on a McCain victory) to half of the survey respondents, and assign the traditional prospective economic evaluation

\textsuperscript{13}See Kelley (1950) on the halo effect, and Todorov et al. (2005) and recently Verhulst, Lodge and Lavine (2010) on the halo effect for political candidates.

\textsuperscript{14}One’s belief about which of these mechanisms is at work will of course have an effect on how we interpret any findings of a statistical relationship between conditional prospective economic evaluations and vote choice, a point we address in greater detail elsewhere (self-citation omitted).
question to the other half of the respondents.

The Ghanian data is from an original pre-election survey leading up to the December 2008 National Elections. Ghana has a presidential system with two major political parties, the New Patriotic Party (NPP) and the National Democratic Congress (NDC), and the 2008 election was incredibly competitive and concluded with a run-off election which the NDC won by a razor thin margin. Similar to other patronage democracies, citizens trade political support for personalized access to state resources, and if one’s party does not win the election, there is little hope of access to state resources until the next election. Thus, we expect that respondents’ expectations about their personal and societal economic situation will be different based on which party comes to power.

For our purposes, there are two important differences between the ANES and Ghanaian data sets. The ANES data has the advantage of including both the old and new formats of the prospective economic voting questions, while the Ghanaian data asks only the new form of the question. However, the Ghanian data sets contains the conditional version of both pocketbook and sociotropic prospective economic voting questions, while the ANES only asks the sociotropic questions.\footnote{Examining the difference between conditional sociotropic and pocketbook prospective economic evaluations in Ghana is a potentially very interesting subject for future research. For now, it is beyond the scope of the empirical analysis current paper, where we are simply attempting to demonstrate that voters do condition prospective economic evaluations on expectations concerning elections results.} We therefore leverage the different advantages of the two surveys when appropriate.

### 3.2 Findings

Our primary interest is in ascertaining whether respondents give different answers when conditioning on on the victory of a particular party’s candidate as opposed to on the other party’s candidate. Answering this question is straightforward since the design of both surveys

\[15\]
allow for within-subjects comparison. Overall, the results of our analysis are clear: when given the opportunity, a majority of individuals in both the United States and Ghana state different prospective economic evaluations over the next 12 months given hypothetical victory by different candidates.

**Figure 1** shows the distribution of responses to our new conditional prospective economic evaluations questions by displaying the size of the difference in conditional prospective evaluations of the economy. To identify the distribution of responses to the two questions we simply subtracted each respondents’ ‘McCain wins’ answer from their ‘Obama wins’ answer in the US case and ‘NPP wins’ from ‘NDC wins’ in the Ghanian case. Given that both questions include five valid responses, the maximum possible difference in responses is four categories (i.e. ‘much better’ under Candidate X and ‘much worse’ under Candidate Y). Our key finding is immediately clear in Figure 1: a majority of people in both countries provide different economic expectations when asked to condition on different electoral outcomes.

In the Ghanian case, respondents felt more optimistic about future economic conditions under the NDC (47% for egotropic evaluations and 48% for sociotropic evaluations) and only a minority of respondents expected the same future economic conditions regardless of the election outcome. Not unexpectedly, Ghanian respondents are slightly more likely to expect electoral consequences in the case of sociotropic conditions compared to their personal economic fate: 26% of respondents expected no difference in future national conditions and 23% felt the same about their personal economic fortunes. These same trends are apparent at the aggregate level as well (see Table 1).

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16 A Kolmogorov-Smirnov test confirms that the distribution of prospective economic evaluations (both egotropic and sociotropic) across the NPP and NDC are significantly different at the .01 level.
Similar results appear in the United States data. Figure 1 depicts both the economic optimism associated with an Obama victory and the fact that only a minority of respondents expected the election outcome to have no effect on the economy over the next year. Indeed, only 36% of respondents indicated that coming economic conditions would be unaffected by the election outcome.\textsuperscript{17}

As an added benefit, the ANES data also allow us to examine whether respondents give different answers to the traditional prospective economic voting question and our new candidate-specific prospective economic voting question. Table 2 presents the distribution of responses to the three prospective economic evaluation questions in the United States. To consider the difference between the standard and candidate-specific questions we need to rely on between-subjects comparison since respondents were randomly assigned to receive either the traditional or conditional measures. However, since question assignment was randomly assigned and the N is large, we can assume the ignorability of treatment assumption and compare the distribution of answers to the traditional and the conditional questions.\textsuperscript{18}

Again, the evidence is clear: people do answer conditional prospective economic evaluation questions differently from the standard prospective economic evaluation question. The first column in Table 2 reports the distribution of responses to the traditional question and this pattern of responses clearly differs from distributions of answers to both conditional

\textsuperscript{17} Again, a Kolmogorov-Smirnov test confirms that the distributions of the two candidates specific questions are different.

\textsuperscript{18} See Morton and Williams (2006).
questions. While a within-respondents comparison is not possible with these data for reasons noted in the previous paragraph, the aggregate differences clearly indicate that the traditional and revised questions are not measuring the same beliefs. We can see, for example, that not all citizens are using the incumbent response regime since the distribution of responses is different for the traditional question and “McCain victory”. Kolmogorov-Smirnov tests again confirm that the distributions of the two candidates specific questions are different from the distribution of responses to the standard question.

4 Conclusion

Scholars have debated the extent to which citizens vote prospectively for more than 25 years (Kuklinski and West 1981; Lewis-Beck 1988; Conover, Feldman, and Knight 1987). Despite mixed results, most studies have remained unified in their use of the standard, yet faulty, economic expectations survey question - “how do you think the economy will perform over the next 12 months?”. After more than 50 articles, we are left with a mixed bag of support for prospective economic voting. Concurrently, we have made scant progress on assessing whether or not people really do vote in accordance with the standard prospective economic voting hypothesis: are voters who believe economic conditions will improve in the future more likely to support incumbent parties than those who believe the economy will get worse in the future? In this paper, we have presented both a theoretical and empirical explanation for this lack of progress. Simply put, the question itself is neither theoretically nor empirically valid. From a theoretical standpoint, it makes little sense to think of future economic expectations independent of who wins the forthcoming election. Put another way, anyone who is asked to evaluate the state of the economy over the next 12 months following a national election must be conditioning on some outcome of that election in making their assessment, even if that conditioning is implicit. As a result, questions that do not take account of this conditioning feature will by definition run the risk of incurring serious measurement error.
and inaccurate results. Not surprisingly, then, the topic of prospective economic voting remains yet unresolved.

With this general concern in mind, we have highlighted two specific troubling characteristics of this standard approach to the study of prospective economic voting at the micro-level. First, we simply cannot know how survey respondents are answering the standard economic expectations question because of its ambiguity. Since the response regime employed could vary across elections, individuals, and countries, it is difficult to confirm or falsify the existence of prospective economic voting based on this measure. It very easily could, however, explain the diversity of findings on prospective economic voting cross-nationally.

Second, given that voters’ beliefs about the future state of the economy vary depending on which party is in office, there are real problems with the standard approach which conceives of economic evaluations as a “respondent-specific”, rather than a “choice-specific”, factor affecting vote choice. According to our logic, voter’s responses to the standard question are a product of both their party-conditional economic execrations and their beliefs about the likely outcome of the election. In order to ensure an accurate assessment of the relationship between economic expectations and vote choice, researchers need to account for the ‘choice-specific’ nature of prospective economic evaluations.

We have demonstrated using the only known available data that the majority of citizens in two countries with very different electoral environments do indeed hold different prospective economic evaluations conditional on the party who wins the election. In both the United States and Ghana, over 60% of citizens evaluated the future state of the economy differently depending on why party was assumed to have won a presidential election.

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19 As demonstrated in the Appendix, if conditions are right this can effect not only the magnitude or significance of the estimated effect of prospective economic evaluations but even the very direction of the effect.

20 An interesting question for future research is what exactly distinguishes this 60% of the population from their compatriots who do not condition their economic evaluations upon election outcomes. Our initial exploration of the data reveals that in both the USA and Ghana, the politically interested, partisan identifiers,
Fortunately, the solution to these problems is clear: we should be studying prospective economic voting using choice-specific survey questions of the type we introduced in the penultimate section of this paper. Not only would such questions solve the problems that we have identified above, but they would also present the opportunity for a whole host of interesting new questions. For example, we could examine whether economic evaluations weigh more heavily in the minds of voters for left wing vs. right wing parties, or for incumbent vs. opposition parties (Weisberg 2002). We could also test whether “mainstream” parties are more dependent on being seen as competent economic managers than perhaps extremist or single-issue parties, or if voters are more likely to vote prospectively in elections where no incumbent candidate is running, such as the 2008 US presidential election.\footnote{While our paper suggests that we may need to rethink much of what we previously thought we knew about prospective economic voting at the micro-level, the future is rife with interesting questions that could be both asked and answered with the use of choice-specific economic expectations question.}

Furthermore, a number of recent studies have raised issues concerning the endogeneity of vote choice or partisanship to retrospective rather than prospective economic evaluations (Anderson, Mendes and Tverdova 2004, Lewis-Beck, Nadeau and Elias 2008, Malhotra and Kuo 2008). The consideration of such problems in prospective economic evaluation can only really be tackled once we have overcome the more serious measurement error problems identified in this paper.
Figure 1: Difference in Prospective Economic Evaluations
Table 1: Responses to Prospective Economic Evaluations Questions Ghana

<table>
<thead>
<tr>
<th></th>
<th>Egotropic Given</th>
<th>Egotropic Given</th>
<th>Sociotropic Given</th>
<th>Sociotropic Given</th>
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<td>NPP Victory</td>
<td>NDC Victory</td>
<td>NPP Victory</td>
<td>NDC Victory</td>
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<tr>
<td>Much Worse</td>
<td>19.8</td>
<td>7.0</td>
<td>23.3</td>
<td>8.6</td>
</tr>
<tr>
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<td>19.4</td>
<td>13.8</td>
<td>21.1</td>
<td>16.4</td>
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<tr>
<td>About the same</td>
<td>16.6</td>
<td>16.3</td>
<td>11.1</td>
<td>13.3</td>
</tr>
<tr>
<td>Somewhat Better</td>
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<td>40.4</td>
<td>31.0</td>
<td>42.5</td>
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<tr>
<td>Much Better</td>
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<td>22.6</td>
<td>13.6</td>
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Table 2: Responses to Prospective Economic Evaluations Questions USA

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<th>Traditional</th>
<th>Given Obama Victory</th>
<th>Given McCain Victory</th>
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</tr>
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<td>About the same</td>
<td>41.0</td>
<td>39.7</td>
<td>51.0</td>
</tr>
<tr>
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<td>20.4</td>
<td>26.2</td>
<td>16.3</td>
</tr>
<tr>
<td>Much Better</td>
<td>8.6</td>
<td>14.5</td>
<td>4.0</td>
</tr>
<tr>
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<td>1160</td>
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<td>1086</td>
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</tbody>
</table>
Appendix

A Simulations

In this Appendix, we detail the simulation process used to generate the conclusions offered at the end of Section 1.2, namely that allowing survey respondents to employ different response regimes in answering the standard prospective economic voting question can lead to qualitatively different patterns of aggregate survey responses (e.g., what proportions says the economy will improve, get worse, etc.) as well as the fact that very different conclusions about the empirical support for prospective economic voting that could be reached using the standard empirical strategy, all the while holding constant each individual’s beliefs about the future performance of the economy conditional on who wins the election as well as each individual’s reported vote choice.

For each of 10,000 simulated individuals, we begin by generating “beliefs” about the future state of the economy in the event that each of three parties controls the government in the future. Specifically, each individual holds a belief about how the economy will fare in 12 months if Party A wins, a potentially different belief if Party B wins, and a potentially different belief if Party C wins. These conditional economic expectations are drawn from the distributions presented in Figure 2. In expectation, individuals in our simulation believe that economic conditions would decline under Party A, stay the same under Party B and improve under Party C.\(^\text{22}\) Note that these beliefs represent the underlying attitudes that are then mapped on to the available survey responses survey respondents confront: worse, same, or better. We then simulate a number of covariates for each individual and calculate each individual’s vote choice through a Downsian utility maximizing model, explained in

\(^{22}\text{In other words, these are the means of the distributions of each set of economic expectations.}\)
detail below. Importantly, we have hardwired economic expectations to be an important determinant of vote choice.\footnote{We do recognize that it may not be the case that economic expectations are a (leading) determinant of vote choice, e.g. if they are swamped out by foreign policy consideration. However, to assume economic expectations do not determine vote choice would yield no differences between response regimes (or if so, a spurious one), rendering the exercise trivial (Sheafer 2008).}

A.1 Actual prospective evaluations

Party-specific prospective economic evaluations were generated as draws from the distributions $\hat{P}_{i,j} \sim N(p_j, 1.5)$, where $p_A = -1$, $p_B = 0$, and $p_C = 1$ (shown graphically in Figure 2). These evaluations serve as the basis for the possible responses that individuals might give to the standard prospective economic evaluation.

[Figure 2 about here]

A.2 Answers to the standard prospective question

Next, we need to generate answers to the standard prospective economic evaluation question. We simulate separate datasets assuming each of the respondents are using each of the following response regimes:

**Case 1: Random Response.** Respondents may be providing a prospective assessment under a randomly chosen party, perhaps the most salient at the time à la Zaller 1992.

$$\tilde{P}^r_i = \Gamma_A(\hat{P}_{i,A}) + \Gamma_B(\hat{P}_{i,B}) + \Gamma_C(\hat{P}_{i,C})$$

(1)

where $\Gamma_j(\cdot)$ is an indicator function that takes the value of 1 if party $j$ is randomly selected, and 0 otherwise.
Case 2: Weighted Average. Individuals respond to the standard question with an average of all party-specific prospective evaluations, weighted by the perceived likelihood that a party will win the election.

\[ \tilde{P}^w_i = \pi_{i,A} \hat{P}_{i,A} + \pi_{i,B} \hat{P}_{i,B} + \pi_{i,C} \hat{P}_{i,C} \]  

(2)

where \( \pi_{i,j} \) is the probability that party \( j \) will win the election. For the “common beliefs” specification, we assumed that all individuals knew that \( \pi_A=0.35, \pi_B=0.45, \) and \( \pi_C=0.20 \). For the “heterogenous beliefs” specification, we assumed that each individual’s beliefs for each party were drawn from \( \pi_{ij} \sim N(\pi_j, 2) \).

Case 3: Likely Winner. Individuals respond to the standard question with an average of all party-specific prospective evaluations, weighted by the perceived likelihood that a party will win the election.

\[ \tilde{P}^v_i = I^v_A(\hat{P}_{i,A}) + I^v_B(\hat{P}_{i,B}) + I^v_C(\hat{P}_{i,C}) \]  

(3)

where \( I^v_j(\cdot) \) is an indicator function that takes the value of 1 if \( \pi_{i,j} > \pi_{i,k} \forall k \neq j \), and 0 otherwise. The “common” and “heterogenous” beliefs cases follow the same distribution described for the previous case.

Case 4: Preferred Party. Individuals provide the prospective economic evaluation under their most preferred party, and exclude all other evaluations.

\[ \tilde{P}^p_i = I^p_A(\hat{P}_{i,A}) + I^p_B(\hat{P}_{i,B}) + I^p_C(\hat{P}_{i,C}) \]  

(4)

where \( I^p_j(\cdot) \) is an indicator function that takes the value of 1 if \( PID_{i,j} > PID_{i,k} \forall k \neq j \),
and 0 otherwise. $PID_{i,j} \sim U[1,10]$, and an individual is identified with Party A with probability 0.20, Party B with probability 0.10, and Party C with probability 0.30.

**Case 5: Incumbent Reelection.** Individuals provide the prospective economic evaluation under the current incumbent party, and exclude all other evaluations.

\[
\tilde{P}_i^l = I_A(\hat{P}_{i,A}) + I_B(\hat{P}_{i,B}) + I_C(\hat{P}_{i,C})
\]  

(5)

where $I_j(\cdot)$ is an indicator function that takes the value of 1 if party $j = A$ (the incumbent party) and 0 otherwise.

### A.3 Voting data

In order to ascertain the vote choice of our 10,000 simulated individuals, we next simulated relevant covariates for all of these individuals. Consistent with standard economic voting theory, we assumed that individuals associate utilities with each party competing in an election. Hence, we defined utilities as a function of candidate-specific characteristics (i.e. candidate-specific prospective economic evaluations and foreign policy competence), individual-specific characteristics (i.e. gender, age, income, education, and party ID), and a random component.

\[
U_{ij} = \beta X_{ij} + \psi_j a_i + \epsilon_{ij}
\]  

(6)

$U_{ij}$ = utility that individual $i$ associates with party $j$,

$X_{ij}$ = traits that individual $i$ perceives from candidate $j$,

$a_i$ = characteristics of individual $i$,

$\epsilon_{ij}$ = random component of unobserved preferences,
\( \beta \) = vector of coefficients associated with candidate-specific characteristics, and 

\( \psi_j \) = vector of coefficients associated with individual-specific characteristics.

The specific values of the coefficients used to simulate our data are provided on table 3.

[Table 3 about here]

In addition, we assumed the random component to be unmeasured individual preferences correlated across parties which allows us to model the relationship between each party’s utility for every individual, hence

\[
\epsilon_{ij} \sim MVN(0, \Sigma) \quad (7)
\]

with covariance matrix \( \Sigma \)

\[
\Sigma = \begin{bmatrix}
1 & \cdot.3 & 1 \\
-\cdot.3 & 1 & \cdot.7 \\
\cdot.1 & \cdot.7 & 1 \\
\end{bmatrix} \quad (8)
\]

Individuals were assumed also to maximize utility, and they vote for the party that produced the highest utility. Descriptive statistics for the simulated data are provided on table 3.

[Table 3 about here]

A.4 Estimation

We required an econometric specification that allows for choice-specific and alternative-specific variables to be accounted as such, but also for disturbances to be correlated. Hence,
we estimated multinomial probit (MNP) models (Hausman and Wise 1978). The specification follows that in eq. 6. To identify the estimation, the utility for Party C was normalized to zero, hence we estimate one set of $\beta$ and two sets of $\psi_j$. Since MNP assumes $\epsilon_{ij}$ to be distributed multivariate normal, we utilize the specification in eq. 8 for the covariance matrix $\Sigma$, hence we did not assume Independence of Irrelevance Alternatives (IIA).

Following Hausman & Wise 1978 and Alvarez & Nagler 1995, we calculate the probabilities of voting for a given candidate as:

$$P_{ij} = \Phi \left( \frac{(\bar{U}_{ij} - \bar{U}_{il})}{\sqrt{\sigma_j^2 + \sigma_l^2 - 2\sigma_{jl}}} \right)$$

(9)

and the probability of voting for the reference party defined as

$$P_{il} = 1 - P_{ij} - P_{ik}$$

(10)

where $\bar{U}_{ij}$ is given by eq. 6.

Expected probabilities are calculated according to King et al. 2000 using the mean values for all variables in Table 3. First differences are simulated according to King 1997 and King et al. 2000.

A.5 Results

Figure 3 displays the distribution of responses under each response regime. These results make clear that how people answer the standard survey question greatly affects the overall distribution of answers.
Our next step is to see whether the different response regimes are likely to affect our assessment of the empirical support for a traditional prospective economic voting hypothesis. With vote choice, covariates, and answers to the standard economic expectations question under each of the different response regimes in hand, we are able conduct a standard econometric analysis of the prospective incumbent hypothesis as is common in the literature. Figure 4 presents the results of this analysis. Each point represents estimates of the effect of changing economic expectations from very pessimistic to very optimistic on the probability of voting for the party in question while holding all other variables at their mean or mode. Readers should note that all results were estimated using the same econometric strategy and a data set that is identical in all ways save for the changes in economic expectations answers elicited under the different response regimes. The predicted effect of prospective economic evaluations on support for each party using a given response regime are presented in the different rows of the figure.

![Figure 4 about here](image)

The tendency for different response regimes to result in different estimates (even for the same party) is immediately apparent given the variation in the horizontal location of the points presented in each of the three panels. The implication of this pattern of results is clear: conclusions about the existence of prospective economic voting will differ considerably depending on how voters’ answer the standard economic expectations question. Such results would naturally lead researchers to substantiate all sorts of mixed findings regarding the existence of prospective economic voting when it is, in effect, the product of a flawed question. Even more disturbingly, this mixed bag of results is found by gathering data from a

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24 To estimate these effects we followed the standard econometric approach used in previous studies of prospective economic voting in multiparty countries. For each response regime, we estimated a multinomial probit model of vote choice Hausman and Wise (1978). Using the estimated coefficients and standard errors we then calculated the first differences for the prospective economic voting variable and plotted the mean first difference and the 95% confidence interval. Additional details on this procedure are presented in Appendices B and C.
world in which we know that economic expectations are in fact a determinate of vote choice precisely because we let economic expectations figure prominently into utility in our vote choice calculation in the our simulations.

In order to further demonstrate how misleading conclusions generated using the standard survey question and econometric strategy can be, we have also plotted the “true” value of this parameter that researchers would obtain if they applied more appropriate methods on the bottom line of Figure 4).\(^{25}\) Using this “choice-specific” data, we then estimated vote choice using the multinomial probit model and calculated the estimates of the first differences that appear in the plot.\(^{26}\) Notice that these results are consistent with the idea that choice-specific factors affect decisions. Changes in expectations about how well each candidate will handle the economy have the same effect equally across parties (i.e. a good evaluation of any particular party makes individuals more likely to vote for that party). The choice between parties is a function of the value that the choice-specific variable takes for each alternative (i.e. how much better the economy would perform under that party). Hence, better party-specific economic expectations always have the same *positive* effect on voting for each party.

Let us be clear: we are not claiming that a positive evaluation for the economy’s prospects over the next 12 months ought to increase the likelihood of voting for every party; such a claim would be nonsensical. Instead, we are claiming that the true focus of a prospective economic voting study ought to be whether believing the economy will improve over the next 12 months given that party \(X\) wins the election will increase a respondent’s likelihood of voting for party \(X\), as opposed to, say, thinking that international security would improve in 12 months if party \(X\) wins the election. Similarly, if a voter believes that the economy will be a lot better in 12 months if either party \(X\) or party \(Y\) wins the election, then prospective

\(^{25}\)We know that these are in fact the “true” values because these are precisely the values we used to create the data in our original vote-choice model.

\(^{26}\)See details in Appendix C.
economic evaluations are unlikely to factor into this particular decision between party $X$ and party $Y$, even though the voter weighs prospective evaluations heavily in her decision. It just happens to be that in this particular case, the candidates are tied in this regard. Candidate-specific questions that generate the findings in the last row of Figure 4 allow us to assess whether this is the case. Standard economic expectations questions do not.
Figure 2: Simulations of latent responses to assessments about the future state of the economy conditional on each one of three parties (A, B, & C) being in office. Means are denoted on the figure signalling that on expectation respondents believe that the economy will worsen under party A, remain the same under party B, and improve under party C. Vertical lines represent arbitrary cutpoints that determine which answer was given by the respondent to the prospective question.
Figure 3: Distribution of recoded simulated responses, where simulated latent answers are grouped according to the cutpoints (vertical lines) shown in figure 2. The first row of the grid shows the percentage of answers on each category conditional on each party winning the election. Second and third rows show distribution of responses under each one of the five response regimes. Heterogenous and common belief specifications produced similar distributions, so only common belief specifications are displayed.
Figure 4: First differences (and their associated 95% confidence intervals) for the simulated probability of voting for the indicated party when the prospective economic evaluation changes from the worst to the best assessment under the row response regime. The bottom simulation corresponds to the first differences that should be produced with party-specific data and party-specific econometric models to serve as reference.
Table 3: Descriptive statistics for simulated data

<table>
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<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
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<td>9.06</td>
<td>4.26</td>
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