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The dynamics of candidate evaluations and vote choice in 2008: looking to the past or future?

Roy Elis^{a,1}, D. Sunshine Hillygus^{c,*}, Norman Nie^{b,2}

^a Department of Political Science, Stanford University, Encina Hall West, Room 100, Stanford, CA 94305, USA

^b Stanford Institute for the Quantitative Study of Society, Stanford University, Encina Hall West, Room 104, Stanford, CA 94305, USA

^c Department of Political Science, Duke University, 409 Perkins Library, Box 90204, Durham, NC 27705, USA

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ABSTRACT

In this paper, we leverage a 10-wave election panel to examine the relative and dynamic effects of voter evaluations of Bush, Palin, Biden, McCain, and Obama in the 2008 presidential election. We show that the effects of these political figures on vote choice evolves through the campaign, with the predictive effects of President Bush declining after the nominees are known, and the effects of the candidates (and Palin), increasing towards Election Day. In evaluating the relative effects of these political figures on individual-level changes in vote choice during the fall campaign, we also find that evaluations of the candidates and Sarah Palin dwarf that of President Bush. Our results suggest a Bayesian model of voter decision making in which retrospective evaluations of the previous administration might provide a starting point for assessing the candidates, but prospective evaluations based on information learned during the "Palin effect," based on individual-level changes in favorability towards the vice-presidential nominee, and conclude that her campaign performance cost McCain just under 2% of the final vote share.

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1. Introduction

Despite the historic nature of the 2008 presidential election, it was, in many ways, a predictable election outcome. Given President George Bush's anemic approval ratings, declining support for the Iraq War, and a weak and worsening national economy, many predicted it would be the Democrat's election to lose. Election forecasting models predicted a Democratic win even before the fall campaign got underway (Abramowitz, 2008; Erikson and Wlezien, 2008; Holbrook, 2008). In a special issue of *PS: Political Science*, the nine leading forecasting models had a median forecast of a 52% Democratic win. Obama would go on to win with 54% of the popular vote.³ Although the eventual outcome of the election was not close, these forecasts were made just as the pre-election polls were tightening; indeed, following the Republican National Convention and the announcement of Sarah Palin as the Republican vice-presidential nominee, several polls found a statistical dead heat or a McCain lead.⁴

Even with such volatility in pre-election polls, election forecasters argue the election outcomes are predictable because the electorate ends up voting retrospectively

 $^{^{\}ast}$ Corresponding author. Tel.: +1 (919) 660 4341; fax: +1 (919) 660 4330.

E-mail addresses: elis@stanford.edu (R. Elis), hillygus@duke.edu (D.S. Hillygus), nhnie@stanford.edu (N. Nie).

 $^{^1\,}$ Tel.: +1 (650) 723 1806; fax: +1 (650) 723 1808.

 $^{^2\,}$ Tel.: +1 (650) 723 7353; fax: +1 (650) 723 7351.

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³ At the 2008 Annual Meeting of the American Political Science Association in late August, all but one of the gathered election forecasters predicted Barack Obama would win the fall election. James Campbell predicted that McCain would pull off a victory only because white voters would be hesitant to vote for a black candidate.

⁴ For instance, a Gallup poll from 8/25 showed Obama with just a 1 point lead, and had a 3 point McCain on 9/5. http://www.pollster.com/polls/us/08-us-pres-ge-mvo.php.

(Lewis-Beck and Nadeau, 2001). That is, they look back over the performance of the previous administration – especially on the economy – and then punish or reward the incumbent party. As Walter Lippmann explained, "To support the Ins when things are going well; to support the Outs when they seem to be going badly, this, in spite of all that has been said about Tweedledum and Tweedledee, is the essence of popular government" (1925, 126). According to this perspective, then, the long shadow of George W. Bush should have been a critical predictor of voting behavior in 2008. *Washington Post* journalist Dan Balz predicted in spring 2008 that "the president is a huge weight on McCain's back that he will carry all the way to the finish line in this campaign." ⁵

Yet. others attributed McCain's loss to campaign-specific mistakes - especially his handling of the economic crisis and a selection of Sarah Palin as his running mate - implicitly assuming the electorate votes in a prospective fashion.⁶ In a post-election analysis in Newsweek, historian Iulian Zelizer described the McCain campaign as "an aimless and chaotic operation made worse by poor choices at key moments. Their first mistake was picking Gov. Sarah Palin." Journalist Howard Fineman similarly argued that Palin "sent wavering Democrats, independents and moderate Republicans scurrying to Sen. Barack Obama - even as she has failed to substantially expand Sen. John McCain's support, even among the ranks of self-described conservatives."8 Early scholarly work has also found empirical evidence that Sarah Palin had a negative impact on McCain's electoral chances (Johnston and Thorson, 2009).

Thus, a lingering question from the election was how these two political figures - George W. Bush and Sarah Palin - affected the election outcome. Was McCain an inevitable loser because of Bush's performance in office? Or did McCain doom his own campaign, especially with the selection of Sarah Palin? In other words, did the past (Bush) or future (Palin) weigh more heavily in voter decision making? Although answering these questions is fraught with methodological challenges, we leverage a 10-wave election panel in an attempt to explore the relative and dynamic effects of voter evaluations of Bush, Palin, Biden, McCain, and Obama in the 2008 presidential election. Critically, we show that the effects of these political figures on vote choice evolves through the campaign, with the direct predictive effects of President Bush declining once the nominees are known, and the effects of the candidates (and Palin) increasing towards Election Day. In evaluating the relative effects of these political figures on individuallevel changes in vote choice during the fall campaign, we also find those evaluations of the candidates and Sarah Palin dwarf that of President Bush. Our results are consistent with a Bayesian model of voter decision making in which retrospective evaluations of the previous administration provide a starting point for assessing the candidates, but prospective evaluations based on information learned during the campaign help voters to update their candidate preference. Finally, we estimate the "Palin effect," based on individual-level changes in favorability towards the vicepresidential nominee, and conclude that her campaign performance cost McCain almost 2% of the final vote share.

2. Background

Evaluating the relative effects of Bush and Palin on McCain's electoral chances has clear implications for the ongoing debate about the relative balance of retrospective and prospective considerations in voter decision making (Lockerbie, 1992; Alvarez and Nagler, 1995). For decades, the retrospective perspective has dominated the empirical political science literature (Kiewiet, 1983; Norpoth, 1996). More recently, however, the debate has reemerged, with some scholars finding empirical evidence of prospective behavior, both with aggregate time series evidence (MacKuen et al., 1996) and individual-level survey data (Lewis-Beck, 1988; Lockerbie, 1992). In an attempt to reconcile these different perspectives, Lewis-Beck and Nadeau (2001) argue that the weight of retrospective or prospective evaluations is contextual and can vary across election years - when an incumbent is running he or she is judged on perceived retrospective performance, but candidates with no track record are evaluated on the basis of prospective evaluations.

Our analysis extends the idea that context matters by considering the dynamics of the retrospective and prospective evaluations within a given campaign. We expect that as voters learn information about the candidates, they should give less weight to retrospective evaluations of the previous administration and more weight to their prospective judgments of the candidates themselves. In other words, voter decision-making early in the campaign should be dominated by retrospective evaluations, but such considerations should give way to prospective evaluations as voters learn new information about the promises, policies, and abilities of the candidates. Given the well-documented research on campaign learning and related findings that such learning increases issue-based voting (Kahn and Kenney, 1999; Hillygus and Shields, 2008), these expectations seem rather intuitive. Yet, other research concludes that campaigns largely serve to inform voters of the performance of the previous administration, implying that the effects of retrospective evaluations should actually be magnified over the course of the campaign (Vavreck, 2009; Arceneaux, 2005).

In the context of the 2008 presidential election, then, we would expect that evaluations of President Bush should better predict vote choice early in the campaign than later in the campaign, while the predictive effects of candidate evaluations should come to dominate by Election Day. Moreover, any *changes* in individual-vote choice during the campaign should reflect evaluations of the candidates (or their vice-presidential nominees) themselves more than

⁵ Balz, Dan. "McCain's Bush Burden." *The Washington Post*. March 7, 2008, http://voices.washingtonpost.com/44/2008/03/mccains-bush-burden-1.html.

⁶ From this perspective, McCain's campaign mistakes would be thought to reflect erratic and reckless decision-making skills that lower the electorate's judgment of how the country would fare under McCain-Palin leadership.

⁷ Zelizer, Julian. "Worst Campaign Ever?" Newsweek, November 5, 2008, http://www.newsweek.com/id/167561.

⁸ Fineman, Howard. "The Many Ways That Palin Hurt McCain." Newsweek, October 20, 2008, http://blog.newsweek.com/blogs/racetothefinish/ archive/2008/10/20/the-many-ways-that-palin-has-hurt-mccain.aspx.

evaluations of Presidential Bush. We test these expectations by examining the dynamics of the relationship between evaluations of Bush relative to evaluations of the candidates and their running mates.⁹

We want to first clearly acknowledge that we are not able to draw conclusions about causality given the inherent endogeneity between personal evaluations and vote preference. Nonetheless, we are able to leverage a 10-wave panel study in three important ways that shed new light on the dynamics of the relationship. First, we look at the relative strength of the relationship between candidate evaluations and voting intentions across candidates. Are evaluations of Palin more strongly related to vote choice than evaluations of Biden, for instance? Second, we look at changes over time in the strength of the relationship for each candidate. For example, does the Bush effect increase or decrease as the campaign unfolds? Finally, we consider the wave-by-wave effects conditioning on previous candidate preference so that we can evaluate the effects on individual-level changes in vote choice among those initially undecided. Before proceeding to the findings, we briefly describe the panel study used in the analysis.

3. Data/methodological approach

With multiple interviews of the same respondents over the course of the year leading up to the election, the Associated Press-Yahoo News 2008 election panel study offers a unique opportunity to examine the process by which voters make up their minds. The study tracked the vote intentions and political attitudes of more than 2500 adults over the course of the election campaign using a sample drawn from the probability-based KnowledgePanel[®] Internet panel.¹⁰ The panel included ten waves of data collection, with the first starting in November 2007 and the final wave concluding in December 2008.¹¹

There are, of course, potential drawbacks to using panel data. Most critically, panel attrition can affect the observed results if respondents drop out of the panel non-randomly. A preliminary investigation of panel effects in the AP-Yahoo News Study found that although there were slightly higher rates of attrition among less educated, lower income, minority, and unregistered voters, the changes in distributions between the baseline and post-election surveys were, reassuringly, quite small and the overall impact of panel effects on survey estimates appears to be slight (Kruse et al., 2009). Moreover, after weighting, the final reported vote estimate from the study was 51% Obama, 46% McCain, which was within sampling error of the final election outcome. By comparing panel respondents to several fresh cross-sections, Kruse et al. (2009) also evaluate panel conditioning to see if responses in one wave are influence by participation in previous waves. Although they found some evidence of panel conditioning on the knowledge questions that were repeated, there was little difference between the panelists and respondents from fresh cross-sections on most other items. Despite these potential limitations, the study offers some of the best data available to explore the dynamics of decision making over the course of the entire presidential campaign.

In examining the relative effects of Bush, Obama, McCain, Palin, and Biden, we rely on measures of favorability that were asked in each wave of the study. Respondents were asked "For each of the following individuals, please select if you have a favorable or unfavorable impression of that person. If you don't know enough about the person to have an opinion, you can say that too." Respondents then chose "Very Favorable," "Somewhat Favorable," "Somewhat Unfavorable," or "Very Unfavorable." We recoded "No Opinion/Don't Know Enough to Say" as a neutral, middle category. Although we might prefer to have more detailed measures about how each candidate might handle (or did handle, in Bush's case) important policy issues, these standard favorability measures capture respondents' general evaluations of each political figure.¹²

Aggregate trends in favorability towards the candidates and their vice-presidential nominees during the campaign are graphed in Fig. 1. A couple of interesting findings stand out. First, the percentage of "Don't Know/No Opinion" responses declines for all of the 2008 candidates. In contrast, there are few people unable or unwilling to rate their favorability towards Bush, and the trend remains unchanged through the campaign. This pattern seems consistent with the notion that respondents are learning new information about the candidates, but not about the sitting president (for whom they have had eight years to

⁹ The key assumption is that evaluations of Bush are retrospective, while evaluations of McCain, Obama, Palin, and Biden are prospective. This seems plausible given that it was an open-seat election and the candidates had little direct connection to the previous administration. On the other hand, we might think that evaluations of Bush will shade evaluations of the candidates, making it more difficult to distinguish retrospective and prospective judgments. If so, it becomes especially important that we include Bush evaluations in the multivariate models. Ultimately, we are only able to determine which evaluations are most strongly associated with vote choice—we cannot conclusively determine whether those evaluations are rooted in retrospective or prospective judgments.

¹⁰ The study was a collaboration between The Associated Press and Yahoo Inc., with support from Knowledge Networks and collaboration with Sunshine Hillygus and Norman Nie. KnowledgePanel panelists are chosen via a probability-based sampling method using known published sampling frames that cover 99% of the U.S. population. Sampled non-internet households are provided a laptop computer or MSN TV unit and free internet service. The wave 1 survey (baseline) was fielded on November 2, 2007 to a sample of 3548 panel members age 18 years or older who represented a general population sample. The total number of completed interviews at the baseline was 2714 (76.5% cooperation). This represents a cumulative response rate (CUMRR1) of 11.2%, using the formula specified in Callegaro and DiSogra (2008). This rate is a multiplicative combination of the panel recruitment response rate (AAPOR3), the household profile rate and the survey completion rate, but excludes the household retention rate. The study attempted to re-interview each of the baseline cases for a total of eleven waves. 1068 respondents completed all eleven waves of the survey. Wave 6 of the study was commissioned separately and is not yet available for analysis.

¹¹ Vote choice was collected in two separate post-election waves, one that was fielded starting on Election Day and the other in early December. To maximize the number of respondents, we use the wave 11 vote choice response for those missing a wave 10 response (because of either unit or item nonresponse).

¹² The AP/Yahoo survey does contain some such questions for Obama and McCain, but not for the vice-presidential nominees and not with the same frequency as the favorability measures.

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Fig. 1. Aggregate trends in candidate favorability (weighted by post-stratification weights provided by Knowledge Networks).

form an opinion). Second, the Sarah Palin evaluations stand out because of the especially sharp increase in unfavorability (and even small decline in favorability), suggesting that as people learned more about Sarah Palin, they liked her less. We will examine the consequences of this movement for McCain's electoral chances.

In looking at the relationship between favorability measures and vote choice, we take two different modeling approaches. First, we treat the panel data as a rolling crosssection, estimating the effect of evaluations on candidate choice at each wave of the campaign (controlling for other relevant predictors). Focusing on the cross-sections allows us to trace the effect of various candidate evaluations over the course of the campaign, an approach much like that taken in the priming literature (e.g., Gelman and King, 1993). In the second approach, we estimate a set of models that examine the wave-by-wave effects, conditioning on previous vote. Focusing on individual-level change allows us to estimate the relative effects of candidate evaluations on the probability that a respondent transitions from being undecided to having a candidate preference at each survey wave in the fall campaign.

We control for the standard political and demographic predictors of vote choice in both sets of models. We include party identification (ranging from strong Republican to strong Democrat), as measured in the first wave of the panel in November 2007. To account for ideological preferences, we include a latent measure estimated using standard factor analysis of a battery of policy questions.¹³ The issues include Iraq, abortion, gun control, immigration, redistribution, energy policy, environmentalism, racial issues, stem cell research, gay marriage, health care and taxes. We also include gender (female indicator), race (non-Hispanic, white indicator), education (indicators for high school, some college, BA, advanced degree), age, and the log of annual income.¹⁴ Finally, we simultaneously include the favorability measures for all four candidates and George W. Bush.¹⁵

 $^{^{13}\,}$ Responses were normalized to range from 0 to 1 (liberal to conservative). We included issue questions asked early in the primaries to capture a baseline of the respondents' views not affected by the campaign itself. We utilized an unrotated factor analysis, retaining eigenvalues >2, which resulted in just one retained factor, interpreted as the liberal-conservative dimension.

¹⁴ In order to maintain identical specification across waves, we use a white, non-Hispanic indicator rather than a more detailed measure only because an African-American indicator perfectly predicted vote choice in some waves.

¹⁵ All model results are reported in Appendix. It is worth noting that the favorability measures are quite highly correlated with each other and with the control variables. So, although the results tables show that some standard control variables are not significant, it does not imply that they are not correlated with vote choice – just that the effects may be working through the favorability measures. For comparison, we have included a "baseline" model of Election Day vote choice that omits all favorability measures. Here we see that, as expected, party identification, issue preferences, race, etc. are correlated with vote choice.

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Table 1

The predicted effects of candidate favorability on vote intention in the 2008 campaign from wave-specific, multinomial logistic regressions.

	Primaries				Election				
	Nov '07	Dec '07	Feb '08	May '08	June '08	Sept '08	Early Oct	Late Oct	Nov '08
Bush effect	-10.7 (2.7)*	-12.6 (2.5)*	-10.1 (2.8)*	-2.4 (1.8)	-4.4 (2.0)*	-1.5 (2.5)	-1.9 (2.9)	-4.3 (4.9)	-9.2 (7.1)
Obama effect	20.4 (3.5)*	13.2 (3.2)*	16.3 (3.1)*	40.5 (5.7)*	42.7 (5.4)*	41.5 (6.9)*	46.5 (7.8)*	59.7 (6.1)*	60.7 (5.6)*
McCain effect	-2.7 (3.3)	-6.3 (3.2)*	-2.7 (3.3)	-27.7 (5.4)*	-20.8 (4.5)*	-26.6 (6.7)*	-20.0 (6.2)*	-38.1 (7.1)*	-46.0 (6.6)*
Palin effect						-13.8 (4.5)*	-15.2 (4.8)*	-10.3 (5.4)	-24.9 (6.4)*
Biden effect						13.1 (4.7)*	9.7 (4.5)*	10.7 (6.8)	1.3 (8.3)
% Correctly predicted	76.0%	76.1%	75.8%	81.7%	80.3%	87.1%	87.1%	88.9%	81.8%

*Significant at 5% (standard errors in parentheses).

Notes: the Election Day wave is of voters only. Reported are first differences or change in the predicted probability of a Democratic presidential vote between those with a "Somewhat Unfavorable" and "Somewhat Favorable" candidate evaluation. Continuous covariates are held at their means. Discrete covariates are set to Male, White, with Some college Education.

4. Cross-sectional results

In considering the dynamics of candidate evaluations in the 2008 campaign, we start with our results from the wave-by-wave cross-sectional analysis. Specifically, we estimate a separate multinomial logistic regression for each wave, regressing vote intention on respondent evaluations of the candidates, their running mates, and George W. Bush as well as the aforementioned control variables. We should highlight that the dependent variable necessarily changes at two different points in the time series: Prior to both of the candidates being known (June 2008), our dependent variable is the generic party vote.¹⁶ Once the party nominees are known, the response options are McCain, Obama, or Undecided.¹⁷ Finally, our post-election analysis is of the actual vote, limited to the two major party candidates. We indicate these model changes in the results table with vertical lines between the relevant cells.

Again, we expect that evaluations of Bush should be highly predictive of vote choice early in the campaign, while the evaluations of the other candidates should be more predictive of vote choice by Election Day. Since it is difficult to interpret the coefficients of a multinomial logistic regression directly, we report the full set of model results in the Appendix and present here the substantive effects. Reported in each cell of Table 1 are the first differences – the change in the predicted probability of voting for Obama between those with a "Some-what Unfavorable" candidate evaluation compared to those with a "Somewhat Favorable" candidate evaluation, holding all other variables constant (at a white male with some college education, with all continuous variables set to their means).¹⁸

We take the Election Day wave as an example. Looking at the Barack Obama evaluations indicates that those who are "Somewhat Favorable" are predicted to be 60.7 percentage points more likely to vote for the Democrat than those who are "Somewhat Unfavorable". The predicted effects of the John McCain evaluations are also substantively large and statistically significant (46.0 percentage points) on Election Day. It is, of course, no surprise that we observe a strong relationship between candidate favorability and vote choice. More interesting is how these effects compare to Bush favorability (and the vice-presidential nominees) and relative to earlier points in the campaign.¹⁹ On Election Day, the effect of Bush evaluations and Biden evaluations are not statistically significant, while evaluations of Palin have a strong independent effect on vote choice, even with the extensive battery of controls.²⁰ Those who are "Somewhat Unfavorable" towards Sarah Palin are 24.9 percentage points more likely to vote for Obama than those who are "Somewhat Favorable," even taking into account evaluations of the candidates themselves.

Looking at the results a year out from the election, in contrast, we find a different pattern. In a model of the generic party vote in November 2007, the Bush favorability measure appears as a significant predictor. Those who were "Some-what Favorable" towards Bush were 10.7 percentage points less likely to vote for the generic Democratic ticket compared to those who were "Somewhat Unfavorable." While the Obama evaluation effect is still large (20.4), evaluations of McCain have no effect on vote choice, perhaps reflecting the fact that McCain was not considered a frontrunner at the time – and was not really even viewed as a typical Republican.

We should again highlight that the question wording is necessarily different in the first three waves – vote for the generic party, rather than the specific candidate. Nonetheless, the patterns observed here are consistent with our expectation that retrospective evaluations play an important role early in the presidential campaign, but then give way to prospective evaluations as the campaign progresses. The Palin effect especially might be viewed as evidence of forward-looking behavior on two fronts: first, she was a relative newcomer with a sparse personal record. Second, as a self-proclaimed "maverick," it seems less likely that

¹⁶ Coded categories are the Democratic candidate, the Republican candidate, and a combined Neither/Don't Know/Other.

¹⁷ In the May wave, respondents were asked about both a McCain– Obama match-up as well as a McCain–Clinton match-up.

¹⁸ Calculated using the Clarify package for Stata (Tomz et al., 2003). Given the low likelihood of changes in opinion spanning the full range of favorability ("Very Unfavorable" to "Very Favorable"), we look at the differences in the predicted probabilities between "Somewhat unfavorable" and "Somewhat Favorable," which reflects within-respondent changes observed in the data. Between 12% and 20% of respondents (depending on the candidate) revised their candidate evaluation by at least 2 categories.

¹⁹ We should note that this approach does not directly test the statistical significance of different effects across time.

²⁰ When we re-estimate a similar model for each of the candidates independently (i.e. without controlling for the other candidates simultaneously), the standard errors are equally tight for Bush so that the effect is statistically significant, but we find that the relative effect sizes remain the same.

respondents' evaluations of Palin stemmed from retrospective evaluations of the Republican Party's past performance. It is also notable that evaluations of George W. Bush, which are retrospective almost by definition, are substantively small and statistically indistinguishable from zero by Election Day once we account for evaluations of the candidates themselves.

Taking a somewhat different look at the rolling-crosssection approach, Fig. 2 plots the individual contribution of each of the candidate evaluations to model fit. The model specification is the same as before except that we are adding each candidate evaluation individually to the baseline model (rather than simultaneously) and calculating the model fit. Reported is the percentage correctly predicted - the overall percentage of respondents correctly predicted as Obama, McCain, or Undecided voters based on the estimated model (classified as the outcome for which each respondent has the highest predicted probability of voting). While this is far from an ideal metric of model fit, it offers an intuitive take on the predictive power of the various favorability measures. Looking at the Election Day results, for example, illustrates that the baseline model (standard political and demographic variables) correctly predicts the votes of 85% of respondents in the sample, but adding evaluations of Obama to the model improves the percent correctly predicted to 93%.

There are a couple of key findings to take away from this graph. First, we see that we can correctly classify the majority of respondents using the baseline model with just party identification, issue preferences, and demographics, leaving somewhat less room for improvement with the addition of favorability measures. Even still, we see that including evaluations of Sarah Palin adds more to our ability to predict individual voter behavior than does adding evaluations of George Bush, although the contributions of all of the political figures (including Bush) increase over the course of the campaign. In contrast, prior to the candidates being known (and using the generic vote question), we find evaluations of the individual candidates and evaluations of



Fig. 2. Percent correctly predicted for models predicting vote intention in each wave. Note: the baseline model in each wave excludes all candidate evaluations. We then re-estimate the baseline model with each of the candidates, one at a time, to measure the individual additional contribution of each to percent correctly predicted. Generic vote intention is the measure through February 2008 (Republican Party, Democratic Party, Undecided), after which the measure is candidate-specific (Obama, McCain, Undecided). Model fit for the Election Day wave is based on a standard logistic regression.

Bush are indistinguishable (indeed, neither adds much predictive power beyond the baseline model).²¹

Taken together, these cross-sectional results are consistent with the notion that voters are incorporating new information about the candidates (rather than the previous administration) into their voting calculus as the campaign unfolds. We next turn to an analysis that exploits the panel structure of the data to explicitly examine the individuallevel dynamics of vote choice in the 2008 campaign.

4.1. Analysis of individual change

Although the previous results are suggestive that voters update their vote choice based on prospective rather than retrospective judgments, a plausible alternative is that the campaign simply enlightens voters about the previous administration (e.g., the collapse of Lehman Brothers in September of 2008 provides new information on economic outcomes plausibly related to Bush-era policies). To assess the relative effects of evaluations of Bush, Obama, McCain, Palin, and Biden on the dynamics of voter decision-making more directly, we assess how evaluations of the political figures relate to individual-level changes in vote choice at different stages in the campaign.

A simple descriptive look at changes in vote choice finds just more than 24% of the respondents switched their vote intention at least once between June 2008 (once the candidates were known) and Election Day. So, while the majority of respondents are able to make up their minds once the nominees are known, for a non-trivial group, vote intentions continue to evolve for many voters as they learn new information during the campaign. Table 2 reports the full pattern of changes during the general campaign, taking vote intentions from the June 2008 wave as the baseline. Perhaps most relevant for this analysis is the simple observation that it is much more likely for initially undecided voters to transition towards a candidate than it is for initially decided voters to switch camps. Only 3% of initial Obama voters and 6% of initial McCain voters switched to the opposite camp on Election Day, while 70% of undecided voters have settled on a candidate by then (Table 2, left panel). These are the voters, then, for whom changing evaluations through the campaign should make a difference. And although this doesn't offer a magic bullet for the endogeneity issue, it would seem that undecided voters offer the cleanest look at the effect of the candidate favorability on the vote since these voters do not have an existing candidate preference coloring their evaluations.

We thus estimate a series of wave-specific models of vote choice for those who were undecided in June 2008 to examine how evaluations of Bush, Obama, McCain, Palin, and Biden affect the likelihood of transitioning to a candidate at

²¹ This is not to say that candidate evaluations had no effect on vote intention prior to the candidates being known. Rather, prior to the candidates being known the effect is not large enough to switch the relative rankings of the predicted outcomes for most respondents in comparison to the base model. Once the candidates are known, the magnitude of the favorability effect is sufficiently large to do so.

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Table 2

Individual-level changes in vote intention between June 2008 and each of the waves leading up to Election Day.

Baseline vote intention (June 2008)	September 2008		Early October 2008		Late October 2008			Election day				
0	Obama	McCain	Undecided	Obama	McCain	Undecided	Obama	McCain	Undecided	Obama	McCain	Undecided
Obama (n = 831)	91.1%	4.1%	4.8%	91.9%	3.1%	5.0%	93.1%	3.1%	3.8%	87.3%	3.1%	9.5%
McCain	2.6%	93.9%	3.6%	3.8%	88.2%	8.0%	5.1%	89.5%	5.4%	5.8%	83.9%	10.3%
(n = 851) Undecided (n = 471)	20.3%	28.9%	50.8%	27.8%	24.6%	47.7%	34.2%	24.4%	41.4%	38.8%	31.7%	29.5%

each subsequent wave.²² We use the respondent's vote intention from the June 2008 wave as the baseline vote intention, since it is the last wave of the survey conducted before both Palin and Biden were announced as running mates. We include the same covariates as before.

Given the large number of coefficients and given that it is not straightforward to interpret them directly in a multinomial logistic regression, we again present the predicted effects in Fig. 3, and provide the full model results in the Appendix. For ease of presentation, the figure has mirrored axes for the Republican and Democrats to make it easier to compare across political figures. Reported in each panel of Fig. 3 is the difference in the predicted probability of Obama support in each wave between a "Somewhat Unfavorable" and a "Somewhat Favorable" evaluation (for the specified political figure). The dotted line represents the 95% confidence interval. Comparing the five panels in Fig. 3 provides a concise summary of the dynamic relationship between candidate favorability for each political figure and the probability that an initially undecided voter switched their vote intention at different points in the fall campaign. The McCain panel of Fig. 3, for example, illustrates that, holding all else constant, someone who is "Somewhat Unfavorable" towards McCain is 15 percentage points more likely to transition from "Undecided" in June to support for Obama in September compared to someone who is "Somewhat Favorable" towards McCain. In late October, that first difference is 26 percentage points.

Several patterns are notable. First, the Bush effect is substantively small and statistically indistinguishable from zero for most of the general campaign, including Election Day. That is, for those initially undecided, there is no significant difference in the probability of voting for Obama between those favorable towards Bush and those unfavorable toward Bush. If initially undecided voters were updating their standing vote based on new information about the outcomes of Bush-era policies, we would expect to find an increasingly strong association between respondent evaluations of Bush and the probability of a transition from undecided to making a decision. To be sure, we might expect that undecided voters may well be the group most likely to use prospective judgments, whereas individuals who vote retrospectively should be able to make up their minds earlier in the campaign. If so, this suggests a heterogeneity in voter decision making that would be a ripe topic for future research.

In contrast to the Bush effect, evaluations of Obama and McCain are strongly predictive of vote transitions (51 and 53 percentage point effects, respectively). We also see that evaluations of Palin are predictive of changes in vote choice among Undecided voters; among those undecided in June, those who were somewhat favorable towards Palin were 43 percentage points less likely to support Obama than those who were somewhat unfavorable, even controlling for everything else including candidate favorability. Given the recurring finding of a Palin effect on voter decision making, we next turn to a closer look at how she may have affected the election outcome. Considering the evidence thus far, it appears that prospective evaluations of the candidates and their running mates (in the case of Palin) were more important to the campaign dynamics observed than retrospective evaluations of Bush (although those evaluations could still play a role in the baseline factors like party identification and issue preferences).

4.2. Simulating the Palin effect

Although previous research has typically concluded that vice-presidential nominees have little impact on the election outcome (Dudley and Rapoport, 1989), one of the striking findings from our analyses is that evaluations of Sarah Palin showed a pronounced relationship with vote choice relative to Biden and Bush. Did Sarah Palin hurt or help John McCain by Election Day? Certainly, as we saw in the earlier descriptive analysis, Palin saw a sharp increase in negative evaluations as the fall campaign progressed. Looking at individual-level changes in favorability, we find that 34% of respondents downgraded their evaluations of Palin between September and Election Day, while just 12% became more favorable.

To estimate how these changes in Palin evaluations affected the election results we simulate the election outcome in the counterfactual condition that Palin's favorability did not change from its September levels. In other words, we estimate the impact on total vote share associated with actual changes in Palin's favorability observed during the campaign. The details of the simulation are as follows. We first estimate a logistic regression predicting vote choice among our respondents using observed values of all variables, including Palin's favorability, on Election Day (results reported in Appendix). For this analysis, we rely on all voters (not just

²² Prior to election day, the models are estimated as multinomial logit models with the response options of Obama, McCain, Undecided. The election day model is a simple logit model. Given this change in the model, caution should be taken in comparing the election day coefficients with those of previous waves. The general patterns are the same if we restrict earlier waves to include only those who voted on Election Day, but our confidence intervals get much larger given the reduction in sample size.

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Fig. 3. Predicted effects of candidate evaluations on the probability of transitioning from undecided to Obama. Note: the predicted effect is the change in the predicted probability that someone undecided in June votes for Obama on Election Day associated with a change in evaluation of each political figure from "Somewhat Unfavorable" to "Somewhat Favorable." Dotted lines represent the 95% confidence interval. For ease of comparability across panels, we provide separate (reversed) scales for Republicans (Bush, McCain and Palin) and Democrats (Obama and Biden).

undecided voters), and estimate a model that controls for our standard measures as well as candidate preference in June 2008. We generate predicted probabilities of voting for Obama and McCain based on each respondent's observed values on each variable. We tabulate the predicted outcome (Table 3, "Predicted Outcome") assuming each respondent chooses the candidate with the higher predicted probabilities from the same model, only changing each respondent's Palin favorability rating to be at their September level, and again tally the results (Table 3, "Counterfactual Outcome").

This counterfactual simulation finds that Palin's declining favorability cost McCain 1.6 percentage points on Election Day. Since Obama actually won 53% of the popular vote, it suggests that Palin's campaign performance did not necessarily change the election outcome, but was certainly large enough to be substantively meaningful.

5. Discussion

Using evidence from a unique 10-wave election panel covering the year leading up to the 2008 Presidential Election, we examine the relative and dynamic effects of voter evaluations of Bush, Palin, Biden, McCain, and Obama on presidential vote choice. Across different analyses, we

Table 3

The Palin effect based on counterfactual condition that Palin favorability was unchanged from September.

	McCain-Palin	Obama-Biden
Actual popular vote	46%	53%
Predicted outcome (observed)	49.4%	50.6%
Predicted outcome (counterfactual)	51.0%	49.0%
Palin effect	-1.6%	1.6%

find that evaluations of Bush were predictive of vote choice early in the campaign, but became weaker after the nominees were known. In contrast, evaluations of McCain, Obama, and Sarah Palin became increasingly related to vote choice as the campaign unfolded. Similarly, evaluations of McCain, Obama, and Sarah Palin, but not Bush, predicted changes in vote choice during the campaign. Particularly interesting is that evaluations of Sarah Palin had a sizeable independent effect on vote choice, above and beyond evaluations of the top of the ticket candidates and President Bush. Indeed, we find that the changing evaluations of Palin during the campaign may have cost McCain 1.6% points of the popular vote by Election Day.

Of course, it is difficult to make causal claims with any observational data, our panel design notwithstanding. Nonetheless, the pattern of relationships observed offer some intriguing implications for the ongoing scholarly debate about the relative role of retrospective and prospective evaluations. Recent research by Nadeau and Lewis-Beck has highlighted the need to consider the effect of electoral context on the relative balance of retrospective and prospective considerations in voter decision making. The results here suggest that the context within the election also matters. During the primary season, before the nominees are known, attitudes toward the sitting president seem to carry greater weight, but such retrospective considerations appear to give way to attitudes toward the candidates themselves as the campaign unfolds and voters learn new information. To be sure, we might well observe a very different pattern in contests in which an incumbent is one of the candidates. But the results here suggest any characterization of the American public as either as forward- or backward-looking is much too simplistic given the dynamic nature of voter decision making.

Appendix

Table A1

Model results of multinomial logistic regression predicting respondents' vote intentions (Republican, Democratic, undecided).

	Nov '07	Dec '07	Feb '08	May '08	June '08	Sept '08	Early Oct	Late Oct	Election Day	Election Day (controls only)
Outcome = Republican	Vote									
Obama Favorability	0.85	0.67	0.74	2.31	2.38	2.33	2.43	2.27	1.54	
	(0.11)*	(0.11)*	(0.10)*	(0.16)*	(0.16)*	(0.21)*	$(0.24)^{*}$	(0.23)*	(0.19)*	
McCain Favorability	-0.094	-0.30	-0.31	-1.94	-1.78	-1.93	-1.67	-1.77	-1.10	
	(0.12)	(0.12)*	(0.12)*	(0.16)*	(0.16)*	(0.21)*	(0.21)*	(0.20)*	(0.18)*	
Bush Favorability	-0.59	-0.61	-0.50	-0.25	-0.40	-0.10	-0.27	-0.22	-0.23	
	(0.11)*	(0.10)*	(0.10)*	(0.12)*	(0.13)*	(0.15)	(0.16)	(0.16)	(0.15)	
Palin Favorability						-0.91	-0.93	-0.54	-0.58	
						(0.18)*	(0.18)*	(0.16)*	(0.15)*	
Biden Favorability						0.86	0.74	0.20	0.025	
						(0.23)*	(0.22)*	(0.21)	(0.18)	
Party Identification	1.26	1.21	1.14	0.42	0.35	0.46	0.55	0.56	0.42	0.45
	(0.093)*	(0.090)*	(0.089)*	(0.086)*	(0.086)*	(0.11)*	(0.11)*	(0.11)*	(0.11)*	(0.053)*
Issue Score	1.60	1.57	1.69	0.77	0.86	0.83	0.62	0.91	0.18	1.70
	(0.20)*	(0.20)*	(0.21)*	(0.21)*	(0.22)*	(0.28)*	(0.29)*	(0.30)*	(0.27)	(0.15)*
Female	0.032	-0.0096	-0.031	-0.041	-0.039	0.031	-0.0079	0.19	-0.13	0.14
1471-14-	(0.25)	(0.25)	(0.25)	(0.26)	(0.27)	(0.32)	(0.35)	(0.34)	(0.33)	(0.19)
white	0.27	0.51	0.48	0.29	0.38	0.30	0.096	-0.096	0.044	0.68
Somo Collogo	(0.32)	(0.33)	(0.33)	(0.32)	(0.35)	(0.41)	(0.45)	(0.44)	(0.45)	(0.23)
Some Conege	(0.20)	(0.30)	0.52	(0.22)	0.21	-0.52	-0.52	-0.09	-0.05	-0.40
DA	(0.50)	(0.50)	(0.50)	(0.52)	(0.55)	(0.40)	(0.42)	(0.41)	(0.45)	(0.25)
D.A.	-0.11	(0.25)	(0.25)*	-0.097	0.05	-0.55	-0.49	-0.54	0.14	-0.26
Advanced Degree	(0.33)	(0.33)	(0.33)	(0.30)	(0.38)	(0.44)	(0.49)	(0.49)	(0.47)	(0.20)
Advanced Degree	(0.44)	(0.44)	(0.45)	(0.46)	(0.49)	-0.99	-0.02	-1.44	-1.04	-0.34
Age	-0.0086	-0.00096	-0.014	(0.40)	0.012	0.00)	0.02)	-0.0061	(0.39)	0.0078
Age	-0.0080	(0.00030	(0.014)	(0.023	(0.0095)	(0.0050)	(0.0070)	(0.012)	(0.011)	(0.00078)
Log(Income)	-0.0066	0.011	-0.0050	-0.034	0.14	0.21	0.47	0.26	-0.15	-0.16
Log(meome)	(0.17)	(0.16)	(0.16)	(0.17)	(0.18)	(0.21)	(0.23)*	(0.22)	(0.23)	(0.13)
Constant	-5 39	-4 92	-4 71	-2.45	-2 70	-2.83	-3.62	-1 77	0.31	-1 42
constant	(0.96)*	(0.95)*	(0.94)*	(0.99)*	(1.04)*	(1.28)*	(1 32)*	(127)	(127)	$(0.64)^*$
Outcome = undecided	(0.50)	(0.55)	(0.51)	(0.55)	(1.01)	(1.20)	(1.52)	(1.27)	(1.27)	(0.01)
Obama Favorability	0.55	0.30	034	1 55	1 59	1 56	1 90	1.63		
obaina ravorabinty	(0.086)*	$(0.084)^*$	(0.078)*	(013)*	(0.14)*	(0.18)*	(0.22)*	(0.20)*		
McCain Favorability	-0.073	-0.14	-0.0059	-0.71	-0.54	-0.58	-0.55	-0.60		
, , , , , , , , , , , , , , , , , , ,	(0.090)	(0.089)	(0.086)	(0.12)*	(0.11)*	(0.13)*	(0.14)*	(0.15)*		
Bush Favorability	-0.28	-0.35	-0.22	-0.037	-0.15	-0.083	-0.016	-0.069		
5	(0.089)*	(0.086)*	(0.084)*	(0.11)	(0.11)	(0.13)	(0.15)	(0.15)		
Palin Favorability	· · · ·	. ,	. ,			-0.33	-0.53	-0.10		
5						(0.14)*	(0.14)*	(0.14)		
Biden Favorability						0.48	0.34	0.34		
						(0.19)*	(0.19)	(0.19)		
Party Identification	0.61	0.69	0.60	0.24	0.19	0.15	0.31	0.17		
	(0.063)*	(0.065)*	(0.063)*	(0.074)*	(0.071)*	(0.088)	(0.092)*	(0.093)		
Issue Score	0.79	0.72	0.82	0.46	0.44	0.53	0.30	0.74		
	(0.16)*	(0.16)*	(0.16)*	(0.19)*	(0.19)*	(0.24)*	(0.25)	(0.26)*		

(continued on next page)

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Table A1 (continued)										
	Nov '07	Dec '07	Feb '08	May '08	June '08	Sept '08	Early Oct	Late Oct	Election Day	Election Day (controls only)
Female	-0.12	0.0036	-0.14	-0.036	-0.031	0.27	-0.38	0.073		
	(0.18)	(0.19)	(0.18)	(0.23)	(0.22)	(0.27)	(0.30)	(0.30)		
White	0.28	0.48	0.39	0.33	0.51	0.28	0.18	0.037		
	(0.22)	(0.22)*	(0.22)	(0.26)	(0.27)	(0.32)	(0.36)	(0.37)		
Some College	-0.010	0.042	0.068	-0.16	0.28	-0.41	-0.79	-1.00		
	(0.22)	(0.22)	(0.22)	(0.28)	(0.27)	(0.32)	(0.35)*	(0.35)*		
B.A.	-0.11	0.14	0.25	-0.77	0.33	-0.50	-0.64	-1.29		
	(0.26)	(0.27)	(0.27)	(0.32)*	(0.32)	(0.37)	(0.42)	(0.45)*		
Advanced Degree	0.046	-0.11	-0.010	-0.27	0.032	-0.52	-1.13	-1.61		
	(0.33)	(0.33)	(0.33)	(0.40)	(0.41)	(0.48)	(0.54)*	(0.56)*		
Age	-0.012	-0.0094	-0.010	0.0092	0.0071	0.0026	0.0096	-0.013		
	(0.0061)*	(0.0064)	(0.0062)	(0.0077)	(0.0078)	(0.0094)	(0.010)	(0.010)		
Log(Income)	0.018	-0.013	0.013	-0.23	0.022	0.23	0.25	-0.077		
	(0.12)	(0.12)	(0.12)	(0.15)	(0.15)	(0.18)	(0.19)	(0.20)		
Constant	-1.40	-1.26	-1.71	-1.02	-2.19	-2.36	-2.71	-0.44		
	(0.67)*	(0.69)	(0.66)*	(0.85)	(0.86)*	(1.09)*	(1.14)*	(1.12)		
Ν	1336	1319	1288	1240	1256	1199	1212	1203	1008	1090
Pseudo-R ²	0.491	0.485	0.487	0.547	0.566	0.668	0.685	0.696	0.812	0.509
% Correctly Predicted	76.0%	76.1%	75.8%	81.7%	80.3%	87.1%	87.1%	88.9%	81.8%	72.6%

Note: * Significant at 5%. Standard errors in parentheses. The base outcome is a vote intention for the Democratic ticket. We run a standard logistic regression in Models (9) and (10) given that the Election-Day wave is limited to two possible voting outcomes.

Table A2

Full Model Results for Respondents Undecided in June

	(1)	(2)	(3)	(4)
	Sept '08	Early Oct	Late Oct	Election
Outcome = Republican Vote				
Obama Favorability	1.76	1.33	2.16	1.33
	(0.35)*	(0.42)*	(0.44)*	(0.46)*
McCain Favorability	-1.52	-1.86	-2.15	-1.52
	(0.38)*	(0.45)*	(0.48)*	(0.48)*
Bush Favorability	0.25	-0.31	-0.27	0.016
	(0.29)	(0.31)	(0.36)	(0.39)
Palin Favorability	-0.93	-0.82	-0.90	-1.05
	(0.36)*	(0.37)*	(0.37)*	(0.36)*
Biden Favorability	0.64	1.05	-0.0037	0.65
	(0.44)	(0.43)*	(0.42)	(0.50)
Party Identification	0.62	0.39	0.76	0.15
	(0.21)*	(0.21)	(0.26)*	(0.24)
Issue Score	0.61	0.65	1.26	0.41
	(0.51)	(0.56)	(0.63)*	(0.64)
Female	-1.14	-0.63	0.42	-0.13
	(0.59)	(0.62)	(0.69)	(0.68)
White	-0.55	0.20	-0.56	-0.21
	(0.88)	(0.84)	(0.99)	(1.07)

Table A2 (continued)

	(1)	(2)	(3)	(4)
	Sept '08	Early Oct	Late Oct	Election
Some College	-0.39	-0.27	-0.12	-0.75
	(0.67)	(0.73)	(0.78)	(0.72)
B.A.	-1.27	-0.44	0.061	-0.027
	(0.87)	(0.95)	(1.04)	(1.14)
Advanced Degree	-0.86	-1.71	-2.55	-2.29
-	(1.16)	(1.24)	(1.60)	(1.21)
Age	0.015	-0.013	-0.0043	-0.026
	(0.020)	(0.021)	(0.023)	(0.024)
Log(Income)	0.13	0.20	-0.42	-0.20
	(0.39)	(0.41)	(0.47)	(0.50)
Constant	-2.43	-0.14	0.90	3.50
	(2.49)	(2.42)	(2.58)	(2.73)
Outcome = Undecided				
Obama Favorability	1.20	1.18	1.35	
	(0.30)*	(0.34)*	(0.35)*	
McCain Favorability	-0.48	-0.52	-0.40	
	(0.24)*	(0.22)*	(0.22)	
Bush Favorability	0.12	0.095	-0.087	
	(0.23)	(0.25)	(0.25)	
Palin Favorability	-0.36	-0.55	-0.17	
	(0.25)	(0.23)*	(0.22)	
Biden Favorability	0.095	0.38	0.060	
	(0.35)	(0.32)	(0.32)	
Party Identification	0.11	0.17	0.19	
	(0.15)	(0.15)	(0.15)	
Issue Score	0.50	0.022	0.66	
	(0.40)	(0.39)	(0.43)	
Female	-0.41	-0.41	0.40	
	(0.48)	(0.45)	(0.44)	
White	-0.83	0.034	-0.54	
	(0.62)	(0.58)	(0.56)	
Some College	-0.64	-0.36	-0.84	
	(0.53)	(0.52)	(0.51)	
B.A.	-1.33	-1.07	-0.88	
	(0.71)	(0.74)	(0.73)	
Advanced Degree	-0.43	-1.02	-1.13	
	(0.82)	(0.76)	(0.76)	
Age	0.0012	0.0043	-0.0057	
	(0.016)	(0.015)	(0.017)	
Log(Income)	0.48	0.14	-0.30	
	(0.31)	(0.32)	(0.33)	
Constant	-0.26	-0.42	1.39	
	(1.96)	(1.84)	(1.84)	
Ν	216	211	216	154
Pseudo-R ²	0.367	0.437	0.508	0.671
% Correctly Predicted	73.6%	74.4%	76.4%	89.6%

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Notes: * Significant at 5%. Standard errors in parentheses. The base outcome is a vote intention for the Democratic ticket. We run a standard logistic regression in Models (9) and (10) given that the Election-Day wave is limited to two possible voting outcomes.

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Table A3

Logit model results used for simulating the Palin effect.

	Point estimate	Standard error
Obama favorability	1.32	(0.23)*
McCain favorability	-0.83	(0.22)*
Bush favorability	-0.23	(0.18)
Palin favorability	-0.83	(0.19)*
Biden favorability	0.17	(0.22)
Party identification	0.46	(0.13)*
Issue score	-0.03	(0.34)
Female	-0.038	(0.40)
White	0.15	(0.58)
Some college	-0.67	(0.50)
B.A.	-0.062	(0.58)
Advanced degree	-1.68	(0.69)*
Age	-0.0085	(0.014)
Log (income)	-0.16	(0.28)
Republican vote intention in June	2.62	(0.60)*
Undecided vote intention in June	1.66	(0.54)*
Constant	-0.82	(1.53)
Ν	930	
Pseudo-R ²	0.853	
% Correctly predicted	95.9%	

Notes: *Significant at the 5% level.

Dependent variable is reported vote post-election (McCain = 1, Obama = 0). Vote intentions from the June 2008 wave included to control for unobserved respondent characteristics.

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