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D. Sunshine Hillygus<sup>a</sup>; Michael Henderson<sup>b</sup>

<sup>a</sup> Duke University, Durham, NC, USA <sup>b</sup> Harvard University, Cambridge, MA, USA

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# Political Issues and the Dynamics of Vote Choice in 2008

D. SUNSHINE HILLYGUS\* & MICHAEL HENDERSON\*\*

\*Duke University, Durham, NC, USA; \*\*Harvard University, Cambridge, MA, USA

**ABSTRACT** *The 2008 American presidential contest occurred amidst economic conditions unlike any seen in decades. Media assessments have often attributed Barack Obama's victory to the faltering economy, particularly the financial crisis that erupted just seven weeks before election day. In this article we assess the role of the economy and other political issues on vote choice, and find that the impact of the economic crisis is more nuanced than is often assumed. We find that while the economy did matter for the general election, so too did social issues. More interestingly, the collapse itself seemed to have only a minor impact because so many people had already made up their minds before the collapse. Finally, we show that while Obama benefited from the economy in the general election, it may have actually worked against him in the primary phase of the contest.*

The emerging conventional wisdom about the 2008 presidential election is that Democrat Barack Obama beat Republican John McCain in large part because of the economy. Decades of political science research have argued that when the economy is ailing, voters toss out the incumbent party (e.g. Fiorina, 1981). And perhaps more than ever before in recent history, the economy was salient in the minds of voters in 2008. In the middle of the fall campaign, the country experienced an enormous and unanticipated economic meltdown – the stock market crashed, credit markets collapsed, and financial institutions went belly-up. In the wake of this economic crisis other issues seemed to be dwarfed in comparison. By November, nearly 60% of Americans considered the economy the most important problem while fewer than 15% named the Iraq war, then in its sixth year. Meanwhile, “moral values”, highly touted for their importance to the 2004 campaign, apparently received too little public attention in 2008 even to warrant inclusion as a response option for the “most important issue” question in the exit polls.

It is rare to have a crisis of this magnitude in the middle of a presidential campaign, and this exogenous shock in the midst of routine data collection efforts for the election offers a unique opportunity for political scientists to explore its effects. In this paper, we examine the role and influence of the economic collapse and other political

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*Correspondence Address:* D. Sunshine Hillygus, Associate Professor of Political Science, Department of Political Science, Duke University, 409 Perkins Library, Box 90204, Durham, NC 27708, USA. Email: hillygus@duke.edu

issues – Iraq, social issues, racial attitudes, and economic policy – in the 2008 primary and general election contests using the Associated Press/Yahoo News election panel study. We find that while economic considerations were predictive of vote choice in the general election, the impact of the economic collapse itself was smaller than often suggested because most people had already made up their minds about the candidates by the time it hit. Moreover, above and beyond the financial turmoil, social issue preferences remained important correlates of voter behavior. Finally, although it appears that Obama benefited from economic concerns in the general election campaign, an increasing focus on the economy during spring 2008 may have actually hurt him in the nomination stage of the election.

### **The Political Issues of 2008**

By election day, the American public was intently focused on the economy. Although the economy had been weakening for some time (the National Bureau of Economic Research would later peg December 2007 as the beginning of the recession), the autumn of 2008 saw an economic crisis that President Bush would later call “a pivotal moment in America’s economy”.<sup>1</sup> The economic meltdown was marked by a series of events, beginning on 7 September with a relatively quiet government takeover of Fannie Mae and Freddie Mac and the assumption of liability for over \$5 trillion of mortgages. This was followed on 15 September by the collapse of Lehman Brothers and the sale of Merrill Lynch. The following day, the government bailed out insurance giant AIG with an \$85 billion loan, which was increased to \$123 billion three weeks later. On Saturday, 20 September, in an effort to stabilize the banking industry, President Bush announced a proposal for a \$700 billion bailout of financial institutions. A revised version of the bill was passed and signed into law on 3 October. On 11 October, the stock market ended its worst weekly decline in history, dropping more than 22% in value. By election day, there was widespread recognition that the US was in the worst economic recession since the Great Depression. The national exit polls reported that 93% of voters rated US economic conditions as “poor” or “not so good”.<sup>2</sup>

Although John McCain had seen a surge in the polls in early September following the Republican National Convention and the selection of Alaska Governor Sarah Palin as his running mate, some viewed his response to the financial crisis as the turning point in his campaign.<sup>3</sup> In a 15 September speech that would often be repeated and criticized by the Obama campaign, John McCain responded to the financial events by declaring that “the fundamentals of the economy are strong”. Surprising many, John McCain then announced on 24 September that he was suspending his presidential campaign, effective the next day, to return to Washington for bailout talks. He also called for the postponement of the first presidential debate, scheduled for 26 September. But by midday on the 26th, with negotiations on the bailout package still not complete, McCain resumed campaigning and participated in the debate that evening (widely viewed to be won by Obama).

Focusing on the narrative of these events, many pundits have credited the outcome of the election to the economic collapse. As journalists Dan Balz and Haynes Johnson (2009: 353, 386) tell it,

During the unnerving days in September, when markets collapsed, fear spread throughout the country, and doubts arose about John McCain's erratic behavior, the answer to that question had decisively shifted in Obama's favor. ... The election of 2008 was not about small issues. ... At the end, the election was defined by the greatest economic crisis since the Great Depression, raising even greater challenges for the American people and their political system.

It appears that 2008 may be one of the rare cases in which the conventional wisdom of pundits and the theoretical predictions of scholarly research could actually concur. There is a long line of research that has shown that economy is a key predictor of voting behavior (Kramer, 1971; Fiorina, 1981; Erikson, 1989; Lewis-Beck, 2006; Vavreck, 2009), with the incumbent party being punished for bad times and rewarded for good times. Offering one of the first scholarly analyses of the role of the economy in the 2008 election, Suzanna Linn and her colleagues (2009: 464) similarly conclude that the economic collapse was decisive:

The economy played a critical role in determining candidate support. This comes as no surprise, as the election exit polls and media pundits all pointed at the economy as the most important issue in the election. However, we illustrate just how important the economic crisis was to the election outcome, suggesting that McCain would have won had the crisis not struck.

While there was intense focus on the economy in the closing weeks of the campaign, early in the primary season it seemed that other issues – especially the war in Iraq – might dominate the 2008 campaign. Figure 1 compares issue importance over the course of the campaign, as measured in the open-ended question from Gallup's monthly surveys.<sup>4</sup> When asked the most important problem facing the nation in the monthly Gallup poll just before the Iowa caucuses, 29% of sampled Americans volunteered the war in Iraq compared to 13% mentioning the economy.<sup>5</sup> We see a clear shift in the agenda from the time the candidates tossed their hats in the ring to the ballots being counted on election day. And we also see a sharp spike in the importance of the economy after the economic collapse hit.

Did this dramatic shift in the issue priorities of the electorate have consequences for voter decision making? This trend seems to raise the possibility that the role and impact of the economy may have been very different in the general election than in the nomination stage. Thus, our analysis will not only look at the effect of the economic crisis relative to other policy considerations in the general election, we will also consider how the economy might have played a role in voter decision making in the Democratic primaries.

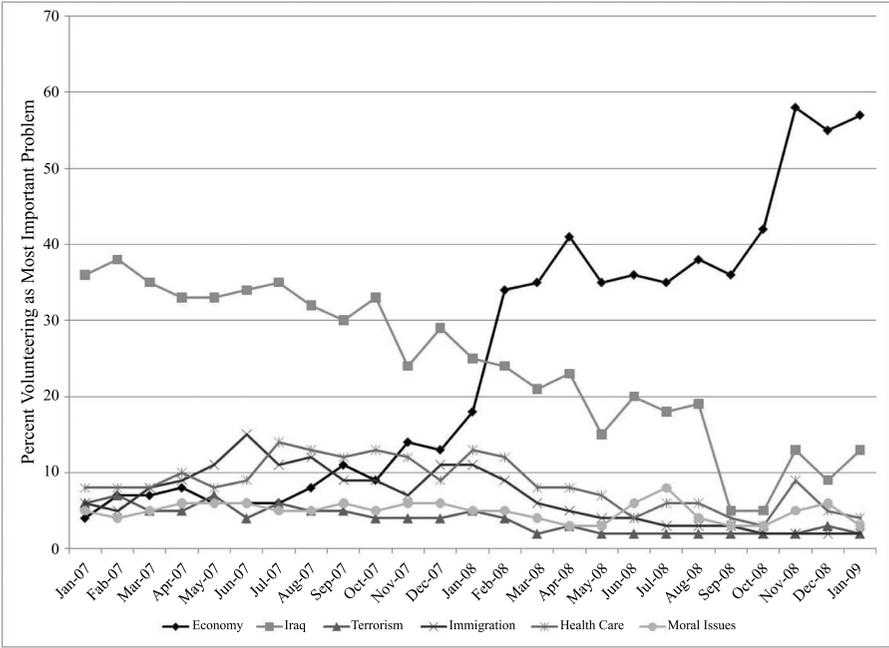


Figure 1. Most important problem, Gallup Poll.

Data

In assessing the role of the economy and other issues in the 2008 election, we rely primarily on data from the Associated Press/Yahoo News 2008 election panel study. A sample of over 2,700 adults was drawn from the probability-based KnowledgePanel® Internet panel and then interviewed multiple times over the course of the year leading up to the election.<sup>6</sup> These data offer a unique opportunity to examine the process by which voters make up their minds, including the link between political issues and voting behavior. The data include over 300 questions on 25 issues. More important than the ample issue coverage, however, is the temporal component of the design. A common concern in looking for evidence of issue voting is that people might change their issue preferences to match their vote choice (Lenz, 2009). One of the advantages of our project is that we measure issue preferences before the party nominees are even known. Moreover, with multiple interviews of the same individual we can compare the attitudes and behaviors of the electorate just before and after the economic collapse. Specifically, wave seven of the study was conducted in the early weeks of September with approximately 90% of respondents in that wave completing the survey prior to the demise of Lehman Brothers. These respondents were then re-interviewed after the series of economic events described above in the ninth wave of the survey (conducted in October) and again post-

election, permitting an examination into any changes that occurred in their opinions about the economy or the impact of those changes on subsequent vote choice. Finally, with interviews as early as a year out from election day, these data allow us to look not only at the correlates of issues and voter behavior in the general election but also at the role of issues in the primary election.

Unfortunately, sorting out the impact of the economic collapse, and the economy more generally, is a tricky task. First, it is not clear how to measure the economy. The retrospective voting literature has typically used voters' perceptions of the state of the economy under the incumbent administration. Historically, those who think the economy has gotten better under the previous administration vote for the incumbent party while those that think the economy has gotten worse vote for the challenger. But 2008 is different. Following the economic collapse, such measures were not very discriminating of vote preferences because there was near consensus about the bleak state of the economy.<sup>7</sup> For example, in response to the American National Election Study's (ANES) perennial question about the state of the economy, more than three-quarters of respondents in 2008 said the economy had gotten "much worse" over the preceding year, and most of the remaining respondents said it had gotten "somewhat worse". These are the most negative assessments of the economy found in any of the ANES surveys over the last eight presidential elections. Even in the tough economic times of the 1980 and 1992 races, less than half of respondents claimed the economy had gotten "much worse" (Holbrook, 2009).

The exit polls help to illustrate this point. Table 1 shows the breakdown of vote choice by the most important problem for both the 2008 and 2004 presidential elections. Compared to 2004, we see that voters were much more likely to be concerned about the economy (63% vs. 20%), and were now less likely to be concerned about Iraq and terrorism. At the same time, more than one-third of respondents selected an issue other than the economy, highlighting the possibility that even in the face of the economic crisis, other issues remained important. We also see that

**Table 1.** Comparison of vote choice by most important issue, 2004 and 2008

	2008 exit polls		2004 exit polls		
	Obama (%)	McCain (%)	Kerry (%)	Bush (%)	
Economy (63%)	53	44	Economy (20%)	80	18
Iraq (10%)	59	39	Iraq (15%)	73	26
Terrorism (9%)	13	86	Terrorism (19%)	14	86
Health care (9%)	73	26	Health care (8%)	77	23
Energy policy (7%)	50	46			
			Taxes (5%)	43	57
			Education (4%)	73	26
			Moral values (22%)	18	80

Source: CNN Website, available at <www.cnn.com> (accessed 22 March 2010).

concern about the economy benefited Barack Obama – the 63% of voters who said the economy was the most important issue facing the country favored Democrat Barack Obama 53% to Republican John McCain’s 44%. The table also suggests, however, that the economy might not have been the best predictor of vote choice in 2008. The near consensus regarding the state of the US economy in 2008 made it less able to distinguish candidate preference. Whereas there was only a 9% advantage for Obama among those who said the economy was the most important issue in 2008, there was a whopping 62% advantage for John Kerry in 2004.

We take a somewhat different approach. As a classic valence issue – everyone is for a strong economy – the relevant opinion is which candidate is perceived to do a better job at achieving the shared economic goal (Petrocik, 1996). Of course, survey questions asking which candidate is trusted to handle the economy better could well be endogenous to vote choice – some people might select their trust on the basis of their preferred candidate, rather than the other way around. Our analysis will (imperfectly) account for this concern by leveraging the panel design of the data, examining changes in candidate trust in handling the economy and vote choice following the economic collapse. In other words, we treat the economic collapse as an intervening event, and condition on pre-collapse values of vote choice and candidate trust in handling the economy in estimating the effect of changes in economic trust on vote choice. To be sure, this approach remains observational and so precludes strong causal claims, but it does allow us to look at the effect of changes among the critical undecided voters, who are presumably less likely to be strategic in answering questions about which candidate they trust to handle the economy better.

### **Issues in the General Election: Was the Economic Crisis a Game Changer?**

We start by showing the aggregate trends in trust for each of the candidates throughout the summer and fall (Figure 2).<sup>8</sup> The question about whom the respondent trusts to do a better job of handling the economy allowed four response options: Obama, McCain, both candidates equally, or neither of them. In the early summer, just over a third of voters trusted Obama to do a better job of handling the economy and just under a third trusted McCain, with the final third trusting neither candidate more than the other (responding either “Both equally” or “Neither”). By the end of the campaign, however, nearly half of voters trusted Obama to do a better job of handling the economy. McCain, whose trust among voters peaked around the time of the conventions, ended about where he began.

The advantage of Associated Press/Yahoo News panel data is not only that we are able to look at individual-level change in trust about handling the economy and in vote choice over the course of the fall campaign, but also that the data provide a measure of these variables just before and after the major events of the financial crisis.<sup>9</sup> This allows us to assess individual-level changes in the relevance of the economy for vote choice induced by the shifting economic terrain – analysis not possible with aggregate data alone.<sup>10</sup> Thus, we compare candidate trust in handling the economy from just before and after the economic collapse, shown in Table 2.<sup>11</sup>

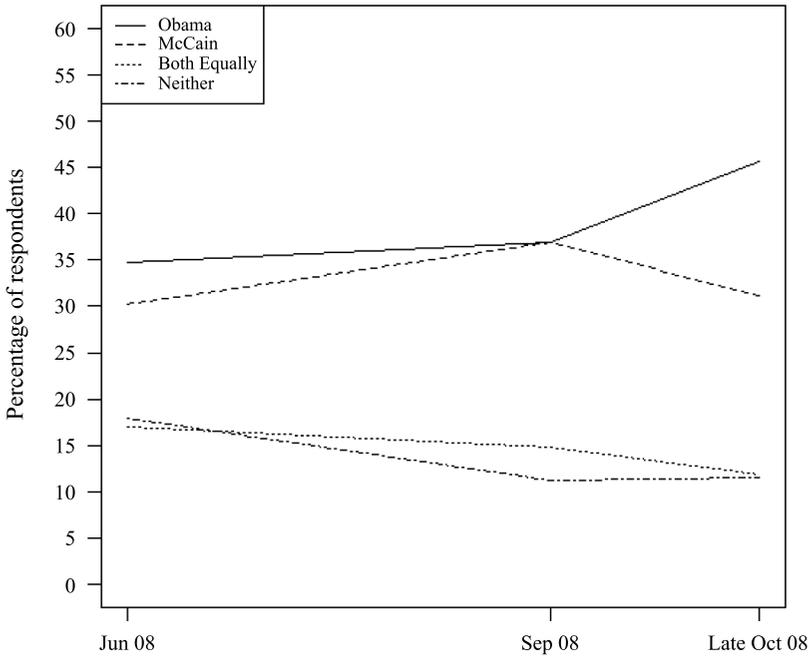


Figure 2. Candidate trust on handling the economy.

Table 2. Percentage trusting the candidates to do a better job handling the economy in October by whom they trusted in September

		October			
		Obama (46.5%)	McCain (30.9%)	Neither/Both equally (22.5%)	Total (100.0%)
September	Obama (39.9%)	94.7	0.5	4.8	100.0
	McCain (35.8%)	4.5	75.7	19.8	100.0
	Neither/Both equally (24.3%)	29.2	15.0	55.8	100.0

Note: Table includes all panel respondents who reported voting for either Obama or McCain in the general election and who completed wave seven prior to 15 September 2009 (89.9% of wave seven respondents).

There are several important patterns to note in this table. First, trust in handling the economy is remarkably stable over this period. Nearly all who trusted Obama in September continue to do so in October; similarly, three-quarters of those trusting McCain in September continue to do so after the economic collapse. Altogether, 79% of respondents did not change their opinion following the economic collapse.

Second, the change that did occur had a net advantage for Obama. Before the collapse Obama led McCain in trust on the economy 39.9% to 35.8%; after the collapse his advantage expanded, 46.5% to 30.9%. So, while Obama already held a 4-point advantage prior to the collapse, more voters came to trust him to do a better job handling the economy after the collapse, giving him a 15-point lead on the issue. But this begs the question: did this shift in trust following the economic collapse have an impact on candidate choice?

Table 3 shows change in candidate support from just before the collapse to election day. Here again, the most striking pattern is one of stability – both candidates retained well over 90% of their early September support. Only 16% of voters changed their mind in any way between early September (pre-collapse) and the election (including those moving from undecided to a decision), but among these Obama again shows an advantage. Obama managed to pick up 6% of McCain supporters, while fewer than 1% defected from Obama to McCain – a small net advantage, but one that could be critical in a close election. Even more so, Obama benefited from undecided voters making up their minds.

Although not shown by these two tables, it turns out that the small amount of shifting on trust in handling the economy that did occur happened among these undecided voters. Obama had a net gain in trust of 10.5% among them – greater than his net gain for the sample as a whole. McCain also improved in the degree to which these undecided voters trusted him; but at 4.5% his net gain was less than half of Obama’s. This descriptive analysis, then, seems to suggest that while overwhelming stability was the most prevalent trend, the transitions that did occur offered a small net benefit to Obama.

To try to gauge the impact of the economic collapse, we estimate a logit model of general election vote choice (a binary indicator taking on a value of 1 for Obama and 0 for McCain, as reported either in the election day survey or the post-election survey) as a function of lagged values of trust in handling the economy, included as binary indicators for trusting Obama and trusting neither candidate more than the other measured in early September, and the differences between late October and early September values of these indicators of trust. The goal of this approach is to

**Table 3.** Percentage of the two party vote by candidate support in September

		Reported vote choice (post-election)		
		Obama (52.6%)	McCain (47.4%)	Total (100.0%)
September	Obama (42.7%)	99.4	0.6	100.0
	McCain (44.2%)	5.9	94.1	100.0
	Undecided (13.2%)	57.5	42.5	100.0

*Note:* Table includes all panel respondents who reported voting for either Obama or McCain in the general election and who completed wave seven prior to 15 September 2009 (89.9% of wave seven respondents).

simultaneously capture the dependence of an outcome on both the initial value of a predictor variable and the amount of change in that variable which occurs between points in time (Finkel, 1993, 1995). In other words, we parcel out the relationship vote choice has with pre-collapse trust in handling the economy, as well as with any changes in trust in handling the economy that occur by October.

The possibility of an endogenous relationship between candidate trust and vote (i.e. respondents express trust in whomever they have decided to vote for rather than deciding to vote for whomever they trust) poses a serious threat. Although impossible to avoid in these observational data, we take several steps to mitigate this concern as much as possible. First, we incorporate the lagged values of vote choice, included as binary indicators of support for McCain and support for neither major party candidate in early September. This addresses the case in which later values of trust (in October) are dependent on prior candidate support (in September). Of course, we still cannot rule out the possibility that there is a synchronous reciprocal relationship (i.e. later values of trust are dependent on contemporary candidate support over and above any dependence on prior candidate support). To further mitigate this concern we also examine an attitude likely to reflect a similar degree of endogeneity as whatever occurs between trust on the economy and vote choice – trust on handling terrorism. If one is concerned that respondents simply rationalize their candidate preference during a survey interview by expressing trust for that candidate on whatever issues are set before them (i.e. they trust the candidate they support simply because they support him), we might expect to find trust on handling terrorism to look nearly identical to the economic trust measure. Descriptively, we find that the distributions on the two items are not mere reflections of one another. We observe variation in levels and changes of trust in handling the economy that are distinct from those of trust in handling terrorism (as well as from those of candidate choice); this suggests that trusting a candidate on an issue is at least not *entirely* dependent on candidate preference. Still, we include trust in handling terrorism, measured in September, in the model, to help tap into that portion of the variation in trust on the economy that is more than a mere reflection of candidate preference permeating trust across issues generally.<sup>12</sup>

A similar concern is that both trust in handling the economy and vote choice reflect something else entirely. Often speculated during the campaign, for example, was that white voters would be hesitant to support a black candidate, and might seek to rationalize that decision in answering the trust questions. That is, if people do not like Obama because of his race, they may not trust him on the economy and the correlation between candidate preference and trust would be spurious. Thus, we control for negative racial attitudes with a dummy variable that takes a value of 1 if the respondent feels “somewhat” or “very” uncomfortable voting for a black person (measured in the November 2007 baseline survey). We also control for a number of standard demographic and political factors, including income, gender, age, education, Hispanic ethnicity, and party identification (all measured in the 2007 baseline survey). Party identification is included as a pair of binary indicators for whether the respondent identified as a Republican or Democrat (baseline is Independent,

including leaners). Because race offers a near perfect prediction of vote choice, the analysis is restricted to non-blacks.

It is equally important that we consider political issues beyond the economic collapse. What was the role of economic positional issues like minimum wage, taxes, or health care? Perhaps the impact of the economic collapse was channeled through the increased salience of these issues for vote choice. How about social and cultural issues such as abortion or same-sex marriage? Some pundits suggested there was ongoing tension between McCain and the socially conservative base of the Republican Party. Our analysis will help to determine the effect of political issues above and beyond the financial crisis.

As with attempting to gauge the impact of the economy as a valence issue, assessing the extent of positional issue voting is subject to its own set of challenges. The primary threat is that voters come to adopt the positions of their preferred candidate rather than adopting the candidate with their preferred positions on the issues (Lenz, 2009). A secondary concern is that single measures of issue attitudes are subject to too much measurement error to reveal real relationships when issue voting does occur (Ansolabehere et al., 2008).

To deal with the former concern, we rely on measures of issue attitudes taken from the first two waves of the panel, before the nominees were known. To address the second concern we combine issues into scales. Recent research has shown that scales of economic and social issues are preferable to self-reported ideology (Treier & Hillygus, 2009). To gauge the impact of moral or cultural attitudes we use an additive scale of policy questions that includes questions about abortion, gay marriage, stem cell research, and school prayer. An economic preference scale is created using policy questions about health care, social security, tax policy, minimum wage, and support for labor unions. And we include a measure of attitudes about Iraq – a dummy variable indicating whether respondents say they believe it was a mistake to invade Iraq (measured in the baseline survey).

As we have noted, we can minimize but not eliminate endogeneity concerns. Nevertheless, the controls included in the model – lagged values of candidate preference, trust on other issues, possible sources of spurious relationships (measured much earlier in the campaign) – help mitigate the threat as much as is possible in the context of observational data on attitudes toward candidates. Again, it should be reiterated that our analysis is focused on estimating the effect of the economic collapse – we are not making claims about how much economic considerations influence voting *in toto*. Given the concerns noted above about each of the variety of measures of economic considerations, such claims are inherently difficult to make. Rather our analysis evaluates changes in attitudes about the candidates' abilities to handle the economy following the economic collapse and the effect of such changes on vote choice. Of course, we must also acknowledge that although we treat the collapse as an intervening event, we cannot be sure that changes in attitudes from just before to just after the collapse are in fact attributable to the collapse. The economic collapse did not occur in a vacuum, but in the midst of a highly visible campaign; we cannot separate the economic collapse itself from the

Table 4. Results from general election

	Difference in Predicted Probability of Obama Support					
	Nov. Vote with Lagged Preference		Nov. Vote without Lagged Preference		Sept. Candidate Preference	
	Estimate	Std. Error	Estimate	Std. Error	Estimate	Std. Error
Lagged Candidate Preference: McCain (Sept)	-0.74*	(0.07)	-	-	-	-
Lagged Candidate Preference: Undecided (Sept)	-0.50*	(0.12)	-	-	-	-
Lagged Trust on Economy: Obama (Sept)	0.63*	(0.10)	0.74*	(0.04)	0.90*	(0.03)
Lagged Trust on Economy: Neither (Sept)	0.31*	(0.10)	0.37*	(0.06)	0.56*	(0.08)
Change Trust on Economy: Obama (Oct-Sept)	0.40*	(0.09)	-	-	-	-
Change Trust on Economy: Neither (Oct-Sept)	0.22*	(0.08)	-	-	-	-
Economic Issue Positions (Nov/Dec 2007)	0.16	(0.20)	-0.45*	(0.13)	-0.40*	(0.14)
Social Issue Positions (Nov/Dec 2007)	-0.53*	(0.14)	-0.55*	(0.09)	-0.42*	(0.10)
Trust on Terrorism: Obama (Sept)	0.46*	(0.13)	0.46*	(0.13)	0.67*	(0.14)
Trust on Terrorism: Neither (Sept)	0.20*	(0.08)	0.38*	(0.06)	0.38*	(0.07)
Iraq War Position (Nov 2007)	-0.11	(0.09)	-0.21*	(0.06)	-0.21*	(0.06)
Negative Racial Attitude (Nov 2007)	-0.02	(0.09)	-0.15*	(0.07)	-0.14*	(0.05)
Democrat (Nov 2007)	0.04	(0.09)	0.06	(0.08)	0.17*	(0.07)
Republican (Nov 2007)	-0.20*	(0.10)	-0.27*	(0.07)	-0.10	(0.06)
Gender: Female (Nov 2007)	-0.01	(0.07)	0.01	(0.06)	0.01	(0.05)
Hispanic Ethnicity (Nov 2007)	-0.08	(0.12)	-0.05	(0.09)	0.00	(0.08)
Age (Nov 2007)	-0.04	(0.11)	-0.14	(0.09)	-0.27*	(0.08)
College Degree (Nov 2007)	0.00	(0.08)	-0.01	(0.06)	0.08	(0.06)

(Continues)

**Table 4.** (Continued)

	Difference in Predicted Probability of Obama Support					
	Nov. Vote with Lagged Preference		Nov. Vote without Lagged Preference		Sept. Candidate Preference	
	Estimate	Std. Error	Estimate	Std. Error	Estimate	Std. Error
Income (Nov 2007)	0.02	(0.09)	0.03	(0.06)	-0.04	(0.06)
Constant	-	-	-	-	-	-
PCP	94.67%		95.88%		95.60%	
N	1,031		1,215		1,295	

*Note:* Results are from logit regressions with reported general election vote or September candidate preference as a binary outcome coded 1 for Obama and 0 for McCain. Standard errors are in parentheses. Sample for lagged model includes only those respondents reporting voting for one of the two major party candidates and who completed the wave seven survey prior to September 15th (89.9% of wave seven respondents). Sample for remaining models include respondents answering that wave and supporting either Obama or McCain. Differences represent the difference in the predicted probability of a vote for Obama associated with the difference between 5th and 95th percentile values of the covariate why all others are held at mean values. The exceptions are the change indicators for trust in handling the economy where the difference represents the comparison between not changing (a value of 0) and coming to support Obama or neither of the candidates more than the other (a value of 1). PCP refers to the percent correctly predicted. \* indicate statistical significance at the 0.05 level.

campaign activity, media reports, or any other events that occurred during this period. To be sure, economic events were no doubt shading media coverage and campaign messages during this time, but we cannot say with certainty exactly why respondents changed their attitudes pre-to-post collapse.

With these limitations in mind, we present the results of our models in Table 4.<sup>13</sup> Reported are the simulated differences in the predicted probability of a vote for Obama.<sup>14</sup> These differences are produced by comparing the probability of a vote for Obama at the 5th and 95th percentile values of each variable while holding all others at mean values.

As we see in the first column, lagged trust in handling the economy and trust in handling terrorism are highly correlated with vote choice. So, even before the economic collapse, the extent to which a respondent trusted a candidate to handle the economy was strongly related to eventual vote choice. More critically, changes in trust are also highly associated with general election vote choice. In other words, even accounting for previous vote choice and pre-collapse attitudes, changes in candidate trust in handling the economy helps to predict final vote choice. Thus, compared to those who did not change, individuals who came to trust Obama after the economic collapse were significantly more likely to vote for him. But since the predicted behavior of respondents depends on values of lagged candidate preference, lagged candidate trust, and post-collapse candidate trust, it is necessary to consider each of these various combinations and their size within the electorate. For each of the (27) combinations of these covariates we generated the predicted probability of voting for Obama (or McCain).<sup>15</sup> Doing so highlights the fact that although we see a big effect for change, there was not a lot of change going on.

For the 88% of voters who supported either Obama or McCain before the collapse, we find nearly complete stability in candidate preference regardless of whom they trust to handle the economy better (or changes in that opinion). Those voters who supported Obama or McCain in September and either always trusted their preferred candidate or came to trust their preferred candidate are predicted to remain loyal to their candidate preference with a probability of 0.92 or higher. Even (the handful of) voters who supported Obama in September and trusted him on the economy in September but not in October are still predicted to vote for Obama with a probability of 0.90.<sup>16</sup> So, this suggests the economic collapse had some impact on vote choice, but not enough to change the behavior of most voters who already supported a candidate pre-collapse.<sup>17</sup>

We report in Table 5 the full set of possible transitions for those voters who were undecided in September. This group is the most theoretically interesting because they exhibit the most change and because they should be the least likely to express trust as a post-hoc justification for earlier candidate preference. In contrast to the large majority of voters who favored a candidate in early September, for the 11.9% of voters who were undecided at that time, the economic collapse appears to have had a significant effect on eventual vote choice. The predicted behavior of these previously-undecided voters is reported in Table 5. For perspective, the relative size of each group in the electorate is also reported. Unsurprisingly, those undecided

**Table 5.** Predicted probability of vote for Obama among voters who were undecided in early September with various patterns of candidate trust in handling the economy

Candidate trusted on economy		Predicted prob. of Obama vote	Percentage of electorate
Post-collapse	Post-collapse		
Obama	Obama	0.94 (0.83, 0.99)	1.55
	McCain	0.26 (0.05, 0.63)	0.10
	Neither/Both equally	0.53 (0.20, 0.82)	0.48
McCain	Obama	0.95 (0.85, 0.99)	0.39
	McCain	0.28 (0.08, 0.57)	1.16
	Neither/Both equally	0.57 (0.29, 0.82)	0.48
Neither/Both equally	Obama	0.96 (0.89, 0.99)	1.75
	McCain	0.34 (0.11, 0.65)	0.48
	Neither/Both equally	0.64 (0.41, 0.84)	5.53

*Note:* Predicted probabilities simulated from model results in Table 4, setting September candidate preference to undecided, the trust in handling the economy variables to the respective values indicated in the rows, and all other covariates to modal (binary demographic indicators), median (ordinal demographic scales), or mean (issue attitudes) values. 95% confidence intervals for the predicted probabilities appear in parentheses.

voters who always trusted Obama to do a better job of handling the economy are predicted to vote for the Democrat in November (0.94 probability), while those always trusting McCain are predicted to vote for the Republican, also with a probability of 0.72 (1.00 minus 0.28). Most interesting is that change in trust appears to be decisive for those undecided voters in early September who come to trust either Obama or McCain after the collapse. Those undecided voters who did not trust Obama to do a better job on the economy before the collapse but came to trust him after the collapse are predicted to vote for him with a probability of 0.96 (weighted average of 0.95 and 0.96). Similarly, those who came to trust McCain on the economy after the collapse are predicted to vote for him with a probability of 0.67 (1 minus the weighted average of 0.26 and 0.34); though, the 95% confidence intervals for these voters cross the 0.50 threshold. It is only among this small subset of voters – approximately 3% of the electorate – where the economic collapse appeared to make a difference. But among this group, two points favored Obama. First, those undecided

voters who come to trust Obama on the economy have a higher probability of voting for the Democrat than those undecided voters who come to trust McCain have for voting for the Republican. In other words, Obama is more likely to benefit from a switch in trust than is McCain. Second, as noted above, more undecided voters were switching their trust on the economy to Obama after the collapse than were switching to McCain. But again, it should be kept in mind that the impact of the economic collapse was felt only among a very small subset of the electorate.

To estimate the impact of the economic collapse on the election outcomes requires an additional step – the simulation of individual predicted behavior in the counterfactual condition in which there was no economic collapse (or, more accurately, there was no change in attitudes about which candidate could best handle the economy). For this exercise we first calculate the probability of a vote for Obama for each respondent in the sample using the results from the model presented in the first column of Table 4 and observed values of the covariates – including observed candidate trust in handling the economy in early September as well as observed changes in candidate trust after the collapse. Predicted probabilities of 0.5 or above are considered votes for Obama; those below 0.5 are considered votes for McCain. Individual votes are then aggregated to obtain the predicted share of the vote for the Democrat candidate. We then recalculate the outcome of the election with no one changing their candidate trust, and keeping all other observed values unchanged. The difference between these outcomes provides an estimate of the impact of the collapse.<sup>18</sup> We find that if there had been no change in trust in handling the economy after early September, Obama's share of the vote (among non-blacks) is predicted to have been only 1.06 percentage points lower than it is with observed values of change – so, Obama received a gain from the collapse, but it was quite a modest one.

In sum, our analysis in some way confirms previous conclusions that the economy helped Obama win. Changes in attitudes about trust in handling the economy following the collapse favored Obama, and those changes were among the best predictors of vote choice. But our results refute the characterization of the collapse as the decisive event. While the collapse offered a slight gain to Obama, the effect was modest and his advantage was apparent before the collapse.

What should be made of the results for positional issues in the first column of Table 4? Social issues stand out as a strong predictor in this model while economic positional issues and attitudes toward the Iraq war fail to do so. These results must be interpreted with care because of the inclusion of lagged candidate preference. The model *does not* indicate that economic positional issues and attitudes about the Iraq war did not matter for vote choice; rather, it indicates that these attitudes had no additional impact on vote choice over and above whatever influence they may have played in candidate preference by September. Indeed, a model of September candidate preference shown in the final two columns of Table 4 (with the obvious exclusion of September candidate preference indicators and measures of change between September and October from the right-hand side) reveals these attitudes to be highly predictive of vote choice and, in the case of economic issue

positions, to a degree similar to that of social issues. Thus, attitudes on the Iraq war as well as on economic and social positional issues (each measured in late 2007) are predictive of candidate preference in September 2008, which in turn is highly predictive of election day vote choice. The economic collapse, having failed to wrench many voters from their September candidate preference, did little to unhinge votes from these issue positions. This is most obvious when considering the middle columns of Table 4, which display results from a model of November vote choice without the lagged values of candidate preference from September. Interestingly, that the social issues scale was significant in all the models suggests that social attitudes continued to play a role in vote choice beyond whatever they contributed to September candidate preference. One possible explanation (untested here) is that social issues saw some renewed salience perhaps as the result of Sarah Palin's place on the ticket. On the whole, these findings offer clear evidence that the economy was not the only factor relevant to voter decision making in the 2008 election; indeed, for at least some voters so-called "small issues" weighed quite heavily upon their decisions.

This leads us back to the second question of this analysis, to which we now turn: what was the role of issues in the nomination stage? In particular, was the economy an issue in primary vote choice as well? And did Obama similarly benefit from the economy in his race against Hillary Clinton? We try to answer those questions by looking at decision making in the Democratic primary.

### **Issues in the Primary Stage: Did the Economy Also Help Obama Win the Nomination?**

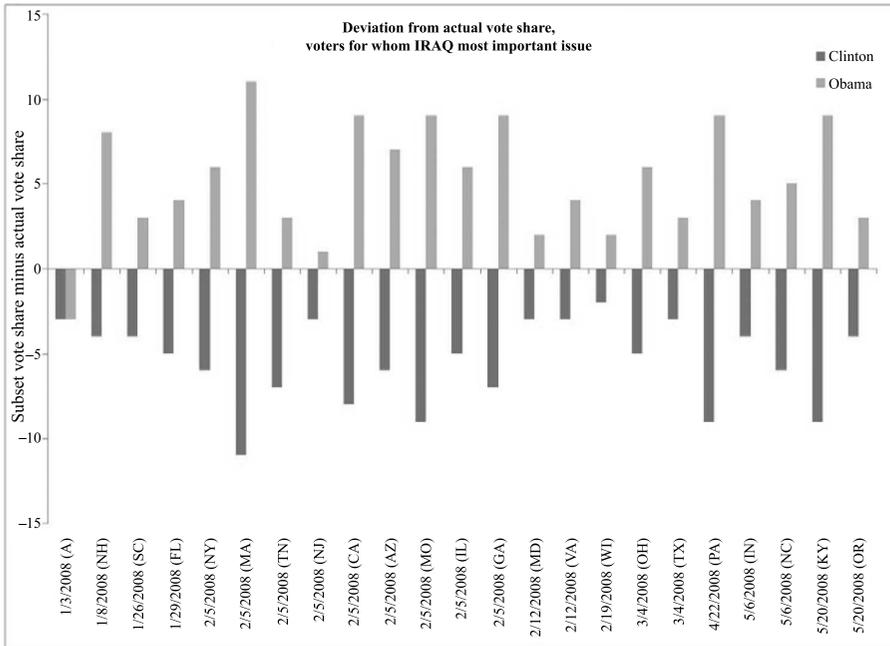
From our analysis of the general election, it seems clear that Obama had a net advantage on the economy – although most of that advantage came prior to the economic collapse rather than after. This raises a question of how the economy may have factored into the nomination stage of the 2008 contest. Was the economy relevant to the selection of Obama as the Democratic nominee? How did it compare to other political issues?

In many respects, it is difficult to predict how issues might matter at the nomination stage. On the one hand, party identification is held constant in the primary contest, so we might expect voters to make decisions on the basis of the other factors that differentiate the two candidates, such as issue positions. On the other hand, rarely do the issue positions of the candidates in a primary contest differ dramatically. Across most issues, Obama and Clinton were nearly identical ideologically. Iraq was perhaps viewed as the issue on which the candidates could be most distinguished, and even here, they both called for an end to the war. The distinction between Obama and Clinton regarded the credibility they had on the issue given their background. Obama often criticized Clinton for voting to give Bush authority to use military force in Iraq in 2002 and for later failing to call that vote a mistake. In contrast, Obama – not a senator in 2002 – said he opposed the invasion from the beginning. On other issues – abortion, same-sex marriage, health care, taxes – the

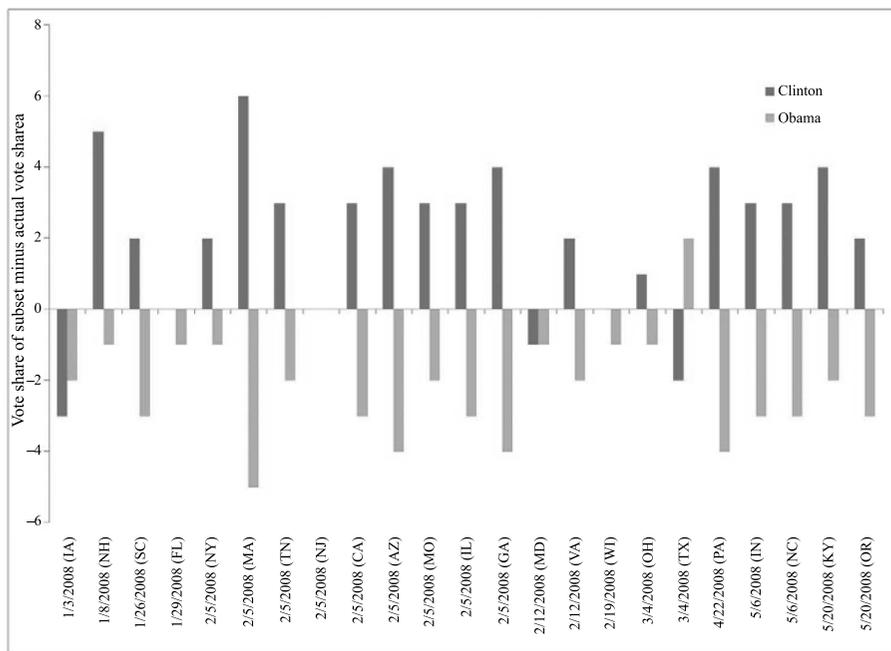
two senators looked ideologically identical (see Jackman & Vavreck, 2010 for additional analyses on this point).

As a consequence, we might expect that the way issues matter in the nomination stage is less about the candidates' issue *positions* and more about their perceived expertise, experience, or prioritization of the issues of concern to individual voters. In the case of the economy, it is particularly unclear whether the advantage Obama enjoyed in the general election was also a presence in the primaries. In a recent working paper, Eichenberg (2009) argues that Clinton had a benefit on the economy, while Obama had an advantage on Iraq. This trend is apparent in the exit polls of the individual state primaries. We see in Figure 3 that Obama generally outperformed his average vote share among the subset of people who considered the Iraq war the most important problem. In contrast, Clinton underperformed. Reported is each candidate's vote share among this subset of voters minus the actual vote share received in the state. For instance, in New Hampshire, Obama won 36% of the actual vote share, but won 44% of those who said Iraq was the most important issue; in contrast, Clinton won 39% of the actual vote share, but only 35% of those who said Iraq was the most important issue.

We calculate this same deviation from actual vote share of Democratic primary voters who said that the economy was the most important issue facing the country, reported in Figure 4. Here we find that Hillary Clinton outperformed among this



**Figure 3.** Candidate performance in Democratic primaries among voters for whom Iraq was the most important problem.



**Figure 4.** Candidate performance in Democratic primaries among voters for whom the economy was the most important problem.

subset of voters, while Obama typically underperformed. Thus, it appears that growing concern about the economy during the primary may have benefited Hillary Clinton. The timing of this shift may well be critical since Obama's win in Iowa on 3 January 2008 – while Iraq was still very much part of public discussion – is widely believed to have jumpstarted his electoral chances.<sup>19</sup> Iowa was important not only because of its traditional first state advantages, but also because Obama's win in the state undermined Hillary Clinton's frontrunner status (and her advantages on name recognition, elite support, and fundraising dollars) and it also demonstrated that he could have appeal in a predominately white, Midwestern state. Although we can only speculate, it is intriguing to consider how the Iowa caucuses – and Obama's overall electoral prospects – might have differed had the economy emerged as the dominant issue just a tad earlier in the campaign.

One alternative hypothesis is that the pattern observed here – Hillary's economic advantage – is an artifact of her appeal to working-class whites on other considerations. If this group of voters was both more concerned about the economy and supported her for other reasons, such as race or ideology, we might get the same pattern. Certainly, there were charges that Clinton tried to play the race card (see discussion in Jackman & Vavreck, 2010). To help account for this possibility, we turn to individual-level analysis of the predictors of Democratic primary support

using the Associated Press/Yahoo News data. We look at the relationship between candidate preference and concern about the economy and Iraq, controlling for these other relevant factors. Following the exit poll data presented above, we tap into the issues of the economy and the Iraq war with measures of importance for the respondent.<sup>20</sup> Although we have to shift gears compared to our general election analysis – our survey does not ask about trust to handle the economy during the primaries – measures of importance are beneficial here as they provide the most direct test of the working hypothesis emerging from the narratives of the primary battle and analysis of exit polls cited above: that voters in the Democratic primaries split along the lines of which issues they cared most about. Our aim here is simply to see if the pattern in the exit polls holds up once potential confounding factors are taken into account.<sup>21</sup>

In addition to concern for the economy and the Iraq war, the model retains positions on economic issues, social issues, positions on Iraq, and racial attitude. As before, standard demographics – gender, income, age, Hispanic ethnicity, and education (analysis is restricted to non-blacks because of lack of variation in dependent variable among African Americans) – are included along with indicators for strong Democrats and non-Democrats (leaving those who identified themselves as Democrats but not strongly so as the baseline).<sup>22</sup> Candidate preference is measured in April 2008 after the primary contest had narrowed to the two major candidates. The question, “If the 2008 Democratic presidential primary or caucuses in your state were being held TODAY and these were the candidates, for whom would you vote?” We use this candidate *preference* question, rather than actual reported primary *vote*, because of variation in the timing and ballots across states (e.g. Obama was not on the ballot in Michigan or Florida). This allows comparability across states since individuals who voted for, say, John Edwards when he was in the race, very well could have had a preference between Clinton and Obama by April. It also, however, creates the difficulty of defining the pool of potential Democratic primary voters. In addition to including all voters reporting participation in the Democratic primary, the question was asked of all self-identified Democrats (including leaners) and non-Democrats who indicated they planned to vote in the Democratic primary (in states where it had not yet been held).<sup>23</sup> Demographics, attitude on race, and positions on the Iraq war, economic issues, and social issues are measured in 2007 before the start of primary voting. Concern for the economy and the Iraq war are measured contemporaneously with candidate preference in April.

Table 6 displays the results from the model including differences in the predicted probability of support for Obama (relative to support for Clinton) associated with differences between respondents at the 5th and 95th percentile of the distribution on each covariate holding all other covariates constant at their means.

Looking first to the findings for the importance measures of the key valence issues from the campaign, we find some support for the descriptive exit poll results. The issue importance measure is a significant predictor of candidate preference, with those individuals more concerned about the economy more likely to support Clinton in the Democratic primary in April. Although the Iraq importance measure

**Table 6.** Results from Democratic primary

	Difference in predicted prob. of Obama vote	
	Estimate	Std. Error
Importance of the economy (April)	-0.19*	(0.07)
Economic issue positions (Nov/Dec 2007)	-0.28*	(0.10)
Social issue positions (Nov/Dec 2007)	0.03	(0.08)
Importance of the war in Iraq (April)	0.03	(0.05)
Iraq war position (Nov 2007)	-0.05	(0.06)
Negative racial position (Nov 2007)	-0.22*	(0.04)
Strong Democrat (Nov 2007)	-0.03	(0.05)
Non-Democrat (Nov 2007)	0.13*	(0.05)
Gender: Female (Nov 2007)	0.01	(0.04)
Hispanic ethnicity (Nov 2007)	-0.09	(0.05)
Age (Nov 2007)	-0.10	(0.06)
College degree (Nov 2007)	0.18*	(0.04)
Income (Nov 2007)	0.06	(0.03)
Constant	-	-
PCP	68.83%	
N	802	

*Note:* Results are from a logit regression with candidate preference in the Democratic Primary measured in April 2008 and coded as a binary outcome with 1 for Obama and 0 for Clinton. The question (“If the 2008 Democratic presidential primary or caucuses in your state were being held TODAY and these were the candidates, for whom would you vote?”) was asked to all Democrats, all non-Democrats intending to vote in the Democratic primary (in states where it had not yet been held), and all non-Democrats who reported having already voted in the Democratic primary (in states where it had been held). Standard errors are in parentheses. Differences represent the difference in the predicted probability of a vote for Obama between the 5th and 95th percentile values of the covariate why all others are held at mean values. PCP refers to the percent correctly predicted.

\*indicate statistical significance at the 0.05 level.

is in the expected direction, it is not statistically significant once other factors are included in the model. Positional attitudes about the Iraq war are not significant, and nor are social issue preferences. Although not surprising given the proximity of Clinton and Obama on these issues, it is interesting that both of these issues emerge as predictors of vote choice in the general election. Perhaps unexpectedly, economic positional issues also have an impact on Democratic primary candidate preference. Those who are more conservative on economic issues were more likely to support Clinton in the Democratic primary, although it is worth noting that less than 15% of this group of voters had a conservative score on this scale.

Similar to Jackman and Vavreck (2010), we find that negative racial attitudes are strongly correlated with candidate preference in the Democratic primary. Racial

attitude is measured with a question about how comfortable respondents feel voting for a black candidate. Those who express some reservations about voting for a black candidate are 22 percentage points less likely to express support for Obama than those who do not. But while the impact of these attitudes on voting behavior is large, the number of potential Democratic primary voters expressing such views is relatively small (4.5% were “very uncomfortable” and 10.5% “had some reservations”), serving to minimize the potential impact of such attitudes on election outcomes. Looking at the remaining covariates we see that Obama had an advantage among the college-educated, the younger, and among non-Democrats. Despite the many claims about Clinton’s gender-based support made during and after the primaries, women appear no less likely to support Obama than Clinton once we account for other explanatory variables.

Overall, then, it appears that Clinton was the candidate most benefiting from economic concerns in the Democratic primary, although the timing of the contests may have worked against her. Between November 2007 and April 2008, the percentage of potential Democratic primary voters who considered the economy extremely important increased 46%. However, by the point in the primary season when the salience of the economy was peaking and Clinton could have reaped this full advantage the opportunity for most individuals to cast a ballot had passed; 82.8% of respondents in this sample live in states where the Democratic primary or caucus was held before April.

In an attempt to estimate the total impact of the changing economic climate, we use the results in Table 6 to simulate counterfactual levels of candidate support in April in the hypothetical situation in which concern about the economy did not change. We first estimate each respondent’s probability of supporting Clinton using their observed values, summing to find the aggregate levels of candidate support in April. We then re-estimate, changing only an individual’s economic importance to their November 2007 value. This exercise finds that changes in concern about the economy reduced Clinton’s predicted share of non-black support by 5.79 percentage points.<sup>24</sup> Of course, we are hesitant to make any predictions about actual election outcomes given the institutional factors – timing of state contests, variation in ballots, eligibility rules for voters, etc. – that have been ignored by our analysis. Nonetheless, our results do suggest that the economy did play some role in the nomination stage, but it was one that was a hindrance, not a benefit, to Barack Obama.

The unanswered question is why Clinton had an advantage on the economy. Although that question is largely beyond the scope of our paper, one possible explanation is nostalgia for the Bill Clinton administration, when the country experienced a long stretch of economic growth. As one journalist argued, “Hillary is practically offering to build a bridge back to the 20th century. The white working-class voters she’s relying on to win say they miss the prosperity and peace of the Clinton years, and they figure she’s the next best thing to getting Bill back.”<sup>25</sup> Another possibility is that the Clinton advantage reflected differences in perceived experience on the issue. A cursory descriptive analysis offers some support to that hypothesis. Among those supporters of Obama and Clinton in April, the latter candidate was generally

seen as the more experienced (generically, not on the issue of the economy specifically). Over 64% gave a higher experience rating to Clinton than to Obama, compared to only 13% giving Obama the higher rating. The relationship appears even stronger for those respondents expressing the greatest concern over the economy. Even before the start of the primaries, among those respondents who say the economy is “extremely important”, 67% see Clinton as more experienced than Obama. Clinton also has an experience advantage among those who perceive the economy as less important, but at a slightly lower level, 58%. But whatever the specific mechanism, the analysis here suggests that it was Hillary Clinton, rather than Barack Obama, who held the advantage on the economy during the Democratic nomination phase.

## Conclusion

With rising unemployment, widespread home foreclosures, and the dramatic collapse of the financial sector, there is little reason to doubt that the state of the American economy in 2008 shaped the outcome of the presidential election. Paradoxically, the overwhelming consensus about the dire condition and importance of the economy also make it more difficult to get a handle on just how this issue had its impact. The vast majority of voters fretted over the economic downturn and claimed it wielded great importance for their votes. This presents the challenge of assessing the economy as a political issue at a time when there is not only agreement about the goal (a more healthy economy) but also widespread consensus about its current state. With little variation on the traditional measure of the valence dimension of the economy, we instead look at changes in voter trust in candidates’ ability to handle the economy before and after the economic collapse. This allows us to tap into the valence dimension of the economy as an issue and weigh it alongside positional economic issues and other considerations.

In the end we find that the economy did matter a great deal – but the story is more nuanced than the conventional wisdom might suggest. First, the impact of the economy wielded its influence prior to the financial collapse of mid-to-late September. Most voters had already made up their minds and remained behind their pre-collapse candidate preference. The economic collapse did shift some voters’ trust in candidate ability to handle the economy and, at least among undecided voters, this offered Obama a slight advantage. However, this is such a small group of voters that the overall impact on the outcome is quite modest. Our analysis predicts that economic collapse was associated with a 1.1 percentage point increase in Obama’s vote share in the general election. Using different data, a different method, and different measures, Johnston et al. (2010) reach a similar conclusion. Although their exact estimate of his gain (3%) is slightly higher than what we found (1%), either figure is well below Obama’s final margin of victory, suggesting that the economic collapse itself was not decisive.

Second, we find that positional issues – attitudes on the Iraq war, social preferences, and economic positional issues – played a role in 2008 as well. These issue

positions are predictive of candidate preference in September before the economic collapse. Once this September preference is taken into account, economic positional issues and attitudes toward the Iraq war have no additional predictive power for November vote choice. This finding indicates that, to the extent these issues mattered for vote choice, their weight was carried through decisions made prior to the collapse. Interestingly, especially given the small amount of attention given to social issues, we find that attitudes on these issues continue to be important predictors of vote choice after the collapse even when accounting for September candidate preference. So, even with the economic collapse dominating the issue agenda in the fall, social issues remained relevant to voter decision making. Taken together, our results highlight that the economic collapse – while a historic financial event with long-reaching economic, social, and political consequences – did not appear responsible for the historic election outcome.

Finally, our analysis shows that the public concern about the economy did not always work in Obama's favor. In the primary phase of the election, concern over the economy was associated with lower levels of support for the eventual nominee. Highlighting the need to account for the dynamic nature of the issue environment in campaign research, our analysis suggests that the timing of the shift in the issue agenda from Iraq to the economy – an advantageous transition for the general election – may have threatened Obama's nomination and helped to prolong the bitterly fought Democratic nomination process.

### **Acknowledgments**

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### **Notes**

1. Public statement, 19 September 2008. Full transcript available at <http://georgewbush-whitehouse.archives.gov/news/releases/2008/09/20080919-2.html>.
2. <http://www.cnn.com/ELECTION/2008/results/polls.main/>.
3. See, for instance, CNN analysis at <http://www.cnn.com/2008/POLITICS/11/05/mccain.anatomy.loss/index.html>. A closer look at the polling numbers suggests that McCain's numbers were in decline even before the Lehman Brothers' collapse; the negative media coverage of Sarah Palin also seems to have contributed to his downturn in aggregate support (Johnston & Thorson, 2009).
4. The graph reports only the "the economy in general" category. Measured in this way, the economy does not overtake Iraq in importance until February 2008 (see <http://www.gallup.com/poll/104464/Economy-Surpasses-Iraq-Most-Important-Problem.aspx>) for details). If we combine that category with "fuel/oil prices" and "unemployment", etc., the "economy" overtakes Iraq three months earlier in November 2007, before any caucuses or primary elections have been held, but still well after the invisible primary is underway (see <http://www.gallup.com/poll/103699/Americans-Economic-Issues-Countrys-Top-Problem-Today.aspx>) for details). Although it is difficult to identify the exact

point at which public attention shifted, it is clear that the economy became increasingly important over the course of the nomination stage of the election. A Google Insights word search similarly finds a sharp increase in the incidence of “economy” over the course of February 2008.

5. Survey by Gallup Organization, 6–9 December 2007. Retrieved 16 October 2009 from the iPOLL Databank, The Roper Center for Public Opinion Research, University of Connecticut. (<http://www.ropercenter.uconn.edu/ipoll.html>).
6. The study was a collaboration between The Associated Press and Yahoo Inc., with support from Knowledge Networks and collaboration with faculty from Harvard and Stanford Universities. The KnowledgePanel® panel members are chosen via a probability-based sampling method and using known published sampling frames that cover 99% of the US population. Sampled non-internet households are provided a laptop computer or MSN TV unit and free internet service. The wave-one survey (baseline) was fielded on 2 November 2007 to a sample of 3,548 panel members age 18 years or older who represented a general population sample. The total number of completed interviews at the baseline was 2,714, and 76.5% of those who were fielded the survey completed the baseline interview. This represents a cumulative response rate (CUMRR1) of 11.2%, using the formula specified in Callegaro and DiSogra (2009). 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 11 waves. 1,068 respondents completed all 11 waves of the survey.
7. Beyond lack of substantial variation in 2008, some scholars have argued that these items could be endogenous to vote preference, with supporters of the incumbent claiming the economy is in great shape and supporters of the challenging party claiming it is in the doldrums (Bartels, 2002).
8. Includes only respondents who voted for Obama or McCain. Figure 4 and all other descriptive statistics are computed using post-stratification weights provided by Knowledge Networks. The post-stratification variables include age, race, gender, Hispanic ethnicity and education using distributions from the most recent data from the Current Population Survey (CPS).
9. The question was asked in the seventh wave of the survey which went into the field on 6 September, two days after the close of the Republican National Convention. Although the survey remained in the field until October, 89.9% of its respondents completed the survey before 15 September when Lehman Brothers declared bankruptcy, Bank of America acquired Merrill Lynch, and the federal government took on AIG. The results in Tables 2 and 3 as well as the model in Table 4 are based on the sample of respondents completing wave seven prior to this date. Our substantive conclusions and model results do not change if we restrict our analysis to those respondents who completed the wave-seven survey before the takeover of Fannie Mae and Freddie Mac.
10. We lose some respondents for this analysis who had only responded to either wave seven or wave nine since the cross-tab necessarily includes only those answering both.
11. We collapse into a single category any respondents who say they trust neither candidate or both candidates equally. While there may be some substantive differences between these two groups, we are interested in relative trust (i.e. trusting one candidate more than the other) so the responses are equivalent – they trust neither candidate more than the other.
12. Like the trust in handling the economy item, the trust in handling terrorism item is included in the model as a series of two binary indicators for trusting Obama and trusting neither candidate more than the other. The excluded category is trusting McCain.
13. As with the regression model presented in Table 6, Table 4 contains differences in predicted probabilities. The full sets of coefficient estimates for all models are contained in the Appendix.
14. The multivariate models are estimated without weighting but with controls for all variables used in calculating the weights (except race because of perfect prediction in some cases) (Gelman & Carlin, 2001). Indeed, some of our post-estimated simulations preclude the use of weights. Nonetheless, when estimating just the weighted model, we find nearly identical coefficients and any changes in standard errors do not change our key conclusions.
15. The probabilities presented in the following two paragraphs (as well as in Table 5) are simulated from the model results with covariates set at particular values. The covariates of interest are candidate

support in early September, trust in handling the economy in early September, and change in trust in handling the economy. All other covariates are set to mean or modal values with trust in handling terrorism set to trusting neither candidate more than the other. To summarize sets of cases (e.g. Obama supporters in early September regardless of whom they trusted to handle the economy), probabilities are averages of the predicted probabilities within the set weighted by the proportion of cases in the set that fall into each category. It is worth noting that there is not data support for 4/27 combinations and there are a very small number of cases in many of the others

16. In fact, there are no cases that supported Obama in September, trusted him on the economy in September, and came to trust McCain on the economy in October, so this probability refers to the 10 cases who supported Obama in September, trusted him on the economy in September, and came to trust neither candidate more than the other in October.
17. The one exception is the very small group of voters who supported McCain in September but came to trust Obama to do a better job on the economy after the collapse – their probability of remaining loyal to McCain is 0.23 (although the confidence interval overlaps 0.50 – the natural cutoff for predicting direction of the vote).
18. Of course, this exercise does not give us a true causal effect since the counterfactual scenario in which no change in trust occurs is not synonymous with a comparison between what actually happened and what might have happened if there had been no economic crisis at all.
19. Iowa entrance polls found that 35% of respondents said the economy was the most important issue and 35% said Iraq was the most important issue: (<http://www.cnn.com/ELECTION/2008/primaries/results/epolls/#IADEM>).
20. We use two questions with identical wording except the name of the relevant issue. The exact wording was “How important is each of the following issues to you personally ... [the economy/the situation in Iraq]?” Respondents had five response options ranging from “Extremely important” to “Not at all important”. Since very few respondents place themselves in the two categories indicating least importance, these two categories are collapsed with the middle category to reduce skew and generate a three-point scale of concern.
21. Although endogeneity is a concern with most observational studies, it is theoretically less clear why those who favored Clinton would justify this support by saying the economy was extremely important while those who favored Obama would make no such justification of their choice. Even if voters engage in post-hoc rationalization of their preference by believing their preferred candidate is favored on the issues that are put before them and then deeming those issues important, it remains theoretically unclear why this sort of justification would show up among one candidate’s supporters but not the other’s. In any event, our aim is simply to identify if there is a relationship, whatever the direction of the causal arrows.
22. A large majority of these non-Democrats are those respondents who identified with neither major party; only 14.5% of them are Republican identifiers (constituting just 5.7% of the sample in this analysis).
23. The 4.6% of leaners (based on follow-up question) were also included in the analysis. It is important to note that the candidate preference question used for defining this is distinct from the question that asked respondents’ actual primary vote. We conduct a similar analysis using reported primary vote as the outcome, restricting the sample to only those primary voters who cast ballots for either Obama or Clinton. The results are nearly identical.
24. Predicting counterfactual election outcomes for nomination contests is exceptionally tricky for at least two reasons, one having to do with our analysis sample and the other with the nature of presidential primary contests. First, because our analysis sample is non-black likely Democratic primary voters only, Clinton has higher levels of support among this sample than she would have among all likely Democratic primary voters. Black respondents choosing between Clinton and Obama in the April survey broke for the latter 82% to 18%. In the sample used in this analysis Clinton has a “vote share” of 62%. Second, these predicted outcomes cannot actually refer to vote shares at all. Analyses of candidate preferences from a nationally representative sample in April are difficult to map back on to possible behavior in primary elections because the separate contests were held in different places

at different times. The matter is further complicated by the lack of certainty of what the actual vote totals received by each candidate were (see Balz & Johnson, 2009: 273).

25. (<http://www.salon.com/news/feature/2008/04/03/hillary/>).

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Appendix

Table A1. Estimated coefficients for general election models

	Nov. vote with lagged preference		Nov. vote without lagged preference		Sept. candidate preference	
	Estimate	Std. Error	Estimate	Std. Error	Estimate	Std. Error
Lagged candidate preference: McCain (Sept)	-4.30*	(0.73)	-	-	-	-
Lagged candidate preference: Undecided (Sept)	-2.38*	(0.70)	-	-	-	-
Lagged trust on economy: Obama (Sept)	4.03*	(0.73)	4.01*	(0.40)	6.14*	(0.60)
Lagged trust on economy: Neither (Sept)	1.67*	(0.57)	1.59*	(0.30)	2.83*	(0.51)
Change trust on economy: Obama (Oct-Sept)	4.18*	(0.65)	-	-	-	-
Change trust on economy: Neither (Oct-Sept)	1.34*	(0.51)	-	-	-	-
Economic issue positions (Nov/Dec 2007)	0.80	(0.97)	-2.07*	(0.68)	-2.54*	(0.94)
Social issue positions (Nov/Dec 2007)	-2.61*	(0.76)	-2.55*	(0.51)	-2.73*	(0.64)
Trust on terrorism: Obama (Sept)	3.96*	(1.76)	3.01*	(0.72)	3.53*	(0.93)
Trust on terrorism: Neither (Sept)	1.00*	(0.38)	1.64*	(0.27)	1.91*	(0.32)
Iraq war position (Nov 2007)	-0.48	(0.37)	-0.88*	(0.27)	-1.40*	(0.36)
Negative racial attitude (Nov 2007)	-0.08	(0.41)	-0.64*	(0.31)	-1.14*	(0.43)
Democrat (Nov 2007)	0.21	(0.43)	0.25	(0.29)	0.97*	(0.36)
Republican (Nov 2007)	-0.92*	(0.42)	-1.17*	(0.30)	-0.66	(0.39)
Gender: Female (Nov 2007)	-0.04	(0.33)	0.03	(0.24)	0.09	(0.30)
Hispanic Ethnicity (Nov 2007)	-0.30	(0.56)	-0.21	(0.38)	-0.08	(0.52)
Age (Nov 2007)	-0.06	(0.17)	-0.18	(0.12)	-0.52*	(0.15)
College degree (Nov 2007)	-0.03	(0.36)	-0.04	(0.25)	0.48	(0.33)
Income (Nov 2007)	0.00	(0.08)	0.03	(0.05)	-0.04	(0.06)

(Continues)

**Table A1.** (Continued)

	Nov. vote with lagged preference		Nov. vote without lagged preference		Sept. candidate preference	
	Estimate	Std. Error	Estimate	Std. Error	Estimate	Std. Error
Constant	1.50	(1.14)	0.26	(0.60)	-0.93	(0.75)
PCP	94.67%		95.88%		95.60%	
N	1,031		1,215		1,295	

*Note:* Results are from logit regressions with reported general election vote or September candidate preference as a binary outcome coded 1 for Obama and 0 for McCain. Standard errors are in parentheses. Sample for lagged model includes only those respondents reporting voting for one of the two major party candidates and who completed the wave seven survey prior to September 15th (89.9% of wave seven respondents). Sample for remaining models include respondents answering that wave and supporting either Obama or McCain. Higher values for economic issue positions, social issue positions, and Iraq War position indicate more conservative positions on these issues. The measure of social issue positions is a scale including attitudes on abortion, same sex marriage, stem cell research, and school prayer. The measure of economic issue positions is a scale including attitudes on health care, Social Security, taxes, the minimum wage, and labor unions. For September trust in handling the economy and trust in handling terrorism, the excluded category is trusting McCain. Change in trust on handling the economy is the October value of the dummy minus the September value of the dummy. PCP refers to the percentage correctly predicted.

\* indicate statistical significance at the 0.05 level.

**Table A2.** Estimated coefficients from Democratic primary model

	Estimate	Std. Error
Importance of the economy (April)	-0.80*	(0.29)
Economic issue positions (Nov/Dec 2007)	-1.32*	(0.53)
Social issue positions (Nov/Dec 2007)	0.11	(0.36)
Importance of the war in Iraq (April)	0.13	(0.24)
Iraq war position (Nov 2007)	-0.20	(0.25)
Negative racial position (Nov 2007)	-1.08*	(0.27)
Strong Democrat (Nov 2007)	-0.12	(0.21)
Non-Democrat (Nov 2007)	0.53*	(0.20)
Gender: Female (Nov 2007)	0.05	(0.16)
Hispanic Ethnicity (Nov 2007)	-0.42	(0.25)
Age (Nov 2007)	-0.14	(0.08)
College degree (Nov 2007)	0.75*	(0.17)
Income (Nov 2007)	0.05	(0.03)
Constant	0.14	(0.43)
PCP	68.83%	
N	802	

*Note:* Results are from a logit regression with candidate preference in the Democratic Primary measured in April 2008 and coded as a binary outcome with 1 for Obama and 0 for Clinton. The question (“If the 2008 Democratic presidential primary or caucuses in your state were being held TODAY and these were the candidates, for whom would you vote?”) was asked to all Democrats, all non-Democrats intending to vote in the Democratic primary (in states where it had not yet been held), and all non-Democrats who reported having already voted in the Democratic primary (in states where it had been held). Standard errors are in parentheses. PCP refers to the percentage correctly predicted.

\*indicates statistical significance at the 0.05 level.