Supplementary Appendix

Between October 2008 and October 2009 the national unemployment rate increased from 6.5% to 10.2%. Additionally, Barack Obama (a Democrat) replaced George W. Bush (a Republican) in the White House. Did the types of individuals reporting relatively higher unemployment rates change from 2008 to 2009 as the economy worsened? Did partisan perceptions of the unemployment rate change with the party of the President?

Table A.1 shows a shift in how partisan identification relates to reported unemployment between 2008 and 2009. Whereas the median Democrat reported unemployment rates that were 0.55 percentage points (s.e. = 0.07) higher than the median Republican in 2008, the median Democrat reported unemployment rates that were 0.06 percentage points (s.e. = 0.15) lower than the median Republican in 2009. This finding is consistent with previous work showing that partisan attachments affect economic evaluations (Wlezien, Franklin and Twiggs, 1997; Anderson, Mendes and Tverdova, 2004; Evans and Andersen, 2006; Evans and Pickup, 2010).

Table A.1 also shows a number of differences in how demographics relate to reported unemployment in the 2008 and 2009 benchmarked CCES sample. First, respondents who did not attend college were relatively more negative about unemployment than those who attended college. In 2008, the median reported unemployment rate by respondents who had never attended college was 0.35 percentage points (s.e. = 0.07) higher than the median reported unemployment rate for respondents with a Bachelor’s degree. In 2009, this gap increased to 1.10 percentage points (s.e. = 0.43). The point estimates in this table further show that Black and Hispanic respondents also became relatively more pessimistic about employment between 2008 and 2009, although these differences are not statistically significant at conventional levels. Unlike 2008, when younger respondents reported higher unemployment rates, we observe no differences across age groups in reported unemployment in 2009. Residents of states with more unemployment continued to report statistically significant higher unemployment rates in 2009, although the relationship is somewhat weaker.
than in 2008.

We also compare the correlates of reported unemployment rates on the CCES with the correlates of reported unemployment rates on the ANES. As noted in the text, the 2006 and 2008 ANES also contained questions about the unemployment rate. The question on both surveys did not contain a benchmark, and the 2006 question differed slightly, as it asked respondents their perceptions of the unemployment rate in their state of residence. The results reported in Table A.2 show very similar patterns to those observed in the CCES. Not surprisingly, the point estimate on the effect of the state unemployment rate is larger in 2006 when the question is about state unemployment. The robustness of the results across time and survey suggest that the differences across groups in perceptions of unemployment are likely to hold in a wide variety of contexts.

The final table in the appendix provides statistical tests of the patterns observed in Figure 4. The patterns in Table A.3 show that the same general relationship holds between reported unemployment and qualitative assessments within the boundaries of the historical benchmarks in both the benchmarked and non-benchmarked sample. The first column shows that reported unemployment rates below 10.8% significantly relate to qualitative evaluations of the employment situation in the benchmarked sample, with a one percentage point increase in the reported unemployment rate associating with a 0.104 (s.e. = 0.010) units more negative qualitative evaluation of the employment situation. Similarly, the second column shows that a one percentage point increase in reported unemployment rates below 10.8% associates with a 0.071 (s.e. = 0.023) unit more negative qualitative evaluation of the employment situation in the non-benchmarked sample. We cannot reject the null that the difference between these two coefficients in the benchmarked and non-benchmarked sample, 0.033 (s.e. = 0.025), is statistically indistinguishable from zero at conventional levels. Similar patterns are found when we change our dependent variable to be retrospective economic evaluations, business conditions, or reporting a vote for Obama. These results are consistent with our hypothesis that our benchmark should not substantively change the relationship

Supplementary Appendix–2
between reported unemployment and measures we expect to associate with reported unemployment.

The patterns in Table A.3 also show that there is no statistical relationship between the reported unemployment above the historical maximum and qualitative evaluations in the benchmarked sample. These results are consistent with the respondents who report unemployment rates above the upper bound of the benchmark not attempting to answer the question.
| Dependent Variable      | 2008 Level (LAD) | 2009 Level (LAD) | Difference | 2008 Percentile (OLS) | 2009 Percentile (OLS) | Difference |
|-------------------------|-----------------|-----------------|------------|-----------------------|-----------------------|------------|
| Democrat                | 0.55***         | -0.05           | 0.60***    | 12.09***              | -3.44                 | 15.53***   |
|                         | (0.07)          | (0.16)          | (0.18)     | (1.23)                | (2.35)                | (2.65)     |
| Independent             | 0.31***         | 0.19            | 0.12       | 8.12***               | 3.57*                 | 4.55*      |
|                         | (0.06)          | (0.19)          | (0.20)     | (1.00)                | (2.12)                | (2.34)     |
| Age 18 - 24             | 0.69            | -0.03           | 0.71       | 12.84***              | 0.48                  | 12.36**    |
|                         | (0.48)          | (0.39)          | (0.61)     | (2.62)                | (4.66)                | (5.34)     |
| Age 25 - 44             | 0.49***         | -0.10           | 0.59**     | 10.44***              | -2.05                 | 12.49***   |
|                         | (0.08)          | (0.22)          | (0.23)     | (1.61)                | (2.40)                | (2.89)     |
| Age 45 - 64             | 0.20***         | -0.13           | 0.33       | 4.95***               | -3.17                 | 8.12**     |
|                         | (0.05)          | (0.23)          | (0.24)     | (1.32)                | (2.90)                | (3.19)     |
| Married Male            | 0.17**          | 0.32            | -0.15      | 0.01                  | 6.56***               | -6.55**    |
|                         | (0.07)          | (0.23)          | (0.24)     | (1.48)                | (2.39)                | (2.81)     |
| Unmarried Female        | 0.66***         | 0.30            | 0.35       | 11.45***              | 6.17**                | 5.27       |
|                         | (0.10)          | (0.25)          | (0.27)     | (1.50)                | (2.85)                | (3.22)     |
| Married Female          | 0.62***         | 0.58**          | 0.05       | 10.31***              | 10.27***              | 0.04       |
|                         | (0.11)          | (0.29)          | (0.16)     | (1.34)                | (2.74)                | (3.05)     |
| Black                   | 0.61**          | 0.76            | -0.16      | 6.90***               | 11.83****             | -4.93      |
|                         | (0.23)          | (0.55)          | (0.59)     | (1.41)                | (2.93)                | (3.25)     |
| Hispanic                | 0.10            | 0.14            | -0.04      | 0.39                  | 1.60                  | -1.21      |
|                         | (0.13)          | (0.23)          | (0.26)     | (2.15)                | (2.58)                | (3.36)     |
| Some College            | -0.30***        | -1.03**         | 0.73*      | -5.21***              | -11.73***             | 6.53***    |
|                         | (0.07)          | (0.43)          | (0.44)     | (1.14)                | (2.21)                | (2.44)     |
| Bachelor’s Degree       | -0.38***        | -1.16***        | 0.78*      | -7.35***              | -12.88***             | 5.53***    |
|                         | (0.07)          | (0.43)          | (0.43)     | (1.28)                | (2.13)                | (2.49)     |
| Income Less Than $20,000| 0.77***         | 3.21*           | -2.44      | 10.46***              | 9.41***               | 1.05       |
|                         | (0.21)          | (1.81)          | (1.82)     | (2.39)                | (3.47)                | (4.21)     |
| Income Between $20,000 and $40,000| 0.41*** | 0.04 | 0.37 | 6.55*** | 3.47 | 3.08 |
|                         | (0.10)          | (0.39)          | (0.40)     | (1.69)                | (3.64)                | (4.01)     |
| Income Between $40,000 and $80,000| 0.05 | 0.08 | -0.03 | 2.88* | 0.14 | 2.74 |
|                         | (0.06)          | (0.16)          | (0.17)     | (1.53)                | (2.75)                | (3.15)     |
| Income Between $80,000 and $120,000| 0.02 | 0.02 | 0.01 | 0.72 | 1.02 | -0.29 |
|                         | (0.06)          | (0.16)          | (0.17)     | (1.71)                | (3.04)                | (3.49)     |
| Unemployed              | 0.20            | 0.17            | 0.03       | 3.22*                 | 2.50                  | 0.72       |
|                         | (0.18)          | (0.38)          | (0.43)     | (1.80)                | (3.15)                | (3.63)     |
| State Unemployment      | 0.12***         | 0.07*           | 0.05       | 2.31***               | 1.29***               | 1.02*      |
|                         | (0.02)          | (0.04)          | (0.04)     | (0.36)                | (0.41)                | (0.54)     |
| Constant                | 5.05***         | 10.36***        | 16.82***   | 37.07***              |                      |            |
|                         | (0.16)          | (0.60)          | (3.62)     | (5.84)                |                      |            |

Notes: ***, **, * denote statistical significance at the 1%, 5% and 10% level respectively with robust standard errors block bootstrapped by state in LAD regressions and clustered by state in OLS regressions. 2008: N=2,943; 2009: N=983. Regressions also include minor and missing party, church attendance, union membership, and missing income indicators. The omitted categories are Republicans, age 65+, male, not married, white, 12 years or less of education, $120,000+ for income, employed, not in union, and do not attend church.
Table A.2: Correlates of Reported Unemployment Rate in ANES

| Dependent Variable | Level (LAD) | Percentile (OLS) |
|--------------------|-------------|------------------|
|                    | 2006        | 2008             | 2006    | 2008    |
| Democrat           | 2.33**      | 3.16*            | 7.18**  | 5.90*** |
|                    | (1.11)      | (1.85)           | (2.38)  | (1.46)  |
| Independent        | 0.84        | 3.55**           | 5.41*** | 6.33*** |
|                    | (0.96)      | (1.40)           | (1.80)  | (1.30)  |
| Age 18 - 24        | 3.51        | 8.17**           | 6.88    | 7.64**  |
|                    | (3.72)      | (3.71)           | (5.97)  | (2.49)  |
| Age 25 - 44        | 3.17*       | 5.22***          | 7.47**  | 6.73*** |
|                    | (1.66)      | (1.81)           | (3.11)  | (2.26)  |
| Age 45 - 64        | 1.00        | 2.45             | 2.68    | 2.15    |
|                    | (1.38)      | (1.63)           | (2.84)  | (2.16)  |
| Married Male       | -0.14       | 3.16**           | -3.84   | -0.41   |
|                    | (1.31)      | (1.52)           | (3.02)  | (2.10)  |
| Unmarried Female   | 5.61***     | 9.24***          | 11.30***| 9.81*** |
|                    | (2.14)      | (1.58)           | (2.35)  | (1.22)  |
| Married Female     | 2.03        | 7.79***          | 9.17*** | 10.06***|
|                    | (1.84)      | (2.12)           | (2.83)  | (1.77)  |
| Black              | 15.88***    | 20.81***         | 18.24***| 15.26***|
|                    | (4.98)      | (2.99)           | (3.20)  | (1.37)  |
| Hispanic           | 1.70        | 16.44***         | 3.42    | 13.64***|
|                    | (8.18)      | (3.93)           | (5.55)  | (2.22)  |
| Some College       | -3.14       | -10.54***        | -3.68   | -8.92***|
|                    | (2.71)      | (2.22)           | (3.17)  | (1.46)  |
| Bachelor’s Degree  | -4.68**     | -15.92***        | -14.16***| -19.23***|
|                    | (2.26)      | (2.11)           | (2.79)  | (1.34)  |
| Income Less        | 5.44        | 9.00***          | 7.77*   | 9.83*** |
| Than $20,000       | (4.38)      | (2.20)           | (4.40)  | (3.00)  |
| Income Between     | 4.82        | 0.69             | 9.43*** | 3.08    |
| $20,000 and $40,000| (3.08)      | (2.07)           | (3.63)  | (2.70)  |
| Income Between     | 0.38        | -0.60            | 1.42    | 2.34    |
| $40,000 and $80,000| (1.60)      | (1.53)           | (3.22)  | (2.24)  |
| Income Between     | -0.26       | -2.34            | 0.65    | -2.32   |
| $80,000 and $120,000| (1.16)    | (1.72)           | (2.79)  | (2.32)  |
| Unemployed         | 11.59*      | 2.96             | 8.05    | 2.76    |
|                    | (6.27)      | (2.81)           | (5.15)  | (1.74)  |
| State Unemployment | 1.22*       | 0.05             | 3.57*** | 0.89    |
|                    | (0.69)      | (0.54)           | (1.05)  | (0.53)  |
| Constant           | 2.15        | 12.41***         | 21.68***| 26.19***|
|                    | (3.82)      | (4.55)           | (6.11)  | (4.24)  |

Notes: ***, **, * denote statistical significance at the 1%, 5% and 10% level respectively with robust standard errors block bootstrapped by state in LAD regressions and clustered by state in OLS regressions. 2006: N=656; 2009: N=1,925. Regressions also include minor and missing party, church attendance, union membership, and missing income indicators. The omitted categories are Republicans, age 65+, male, not married, white, 12 years or less of education, $120,000+ for income, employed, not in union, and do not attend church. Standard errors block bootstrapped by state in LAD regressions and clustered by state in OLS regressions.
Table A.3: Comparing Quantitative and Qualitative Economic Assessments in 2008 CCES

| Dependent Variable | Employment Situation | Retrospective Evaluation | Business Conditions | Obama Vote Choice |
|--------------------|-----------------------|---------------------------|----------------------|-------------------|
| Sample             | Bench-marked | Non-bench-marked | Bench-marked | Non-bench-marked | Bench-marked | Non-bench-marked | Bench-marked | Non-bench-marked |
|-------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Centered Unemployment X (1 - Above 10.8%) | 0.104*** | 0.072*** | 0.076*** | 0.068*** | 0.078*** | 0.048*** | 0.058*** | 0.068*** |
|                   | (0.010)      | (0.023)      | (0.010)      | (0.022)      | (0.009)      | (0.021)      | (0.008)      | (0.017)      |
| Difference in Slope Below 10.8% | 0.032 | 0.008 | 0.030 | 0.010 |
|                   | (0.025)      | (0.023)      | (0.023)      | (0.019)      |
| Centered Unemployment X Above 10.8% | 0.002 | 0.001 | 0.001 | 0.001 | 0.002* | 0.001 | 0.001 | 0.001 |
|                   | (0.001)      | (0.001)      | (0.001)      | (0.001)      | (0.001)      | (0.001)      | (0.001)      |
| Above 10.8% | -0.184*** | -0.069 | -0.281*** | -0.202* | -0.198*** | -0.064 | -0.084 | -0.276*** |
|                   | (0.061)      | (0.122)      | (0.061)      | (0.112)      | (0.056)      | (0.106)      | (0.052)      | (0.090)      |
| Constant           | 2.59*** | 2.40*** | 4.85*** | 4.78*** | 2.72*** | 2.52*** | 0.769*** | 0.817*** |
|                   | (0.044)      | (0.107)      | (0.044)      | (0.101)      | (0.042)      | (0.095)      | (0.037)      | (0.076)      |

Notes: *** ** * denote statistical significance at the 1%, 5% and 10% level respectively. All regressions estimated using OLS with robust standard errors (N = 2,943 benchmarked, 969 non-benchmarked). To make the coefficient on the indicator for a response above 10.8% interpretable, we center the percentile by subtracting a constant, as standard in the regression discontinuity literature (Imbens and Lemieux, 2008). The centered percentile measure is the difference between the percentile of reported unemployment and the percentile that a reported unemployment of 10.8% takes in the sample. Thus, the constant captures the expected value for those reporting an unemployment rate of 10.8%, while the indicator captures the discontinuous change in the expected value for those reporting an unemployment rate above 10.8%.