

**PEASANTS *AND* BANKERS:
EDUCATION, CONSUMER SENTIMENT, AND PRESIDENTIAL APPROVAL**

DELIA N. ACEVEDO
University of Hawaii at Manoa

CARLIE FOGLEMAN
Texas A&M University

JOSEPH DANIEL URA
Texas A&M University

ABSTRACT

We revisit the debate over the competing roles of the public's evaluations of experienced (retrospective) and expected (prospective) economic performance for presidential approval. We argue that formal education mediates the relationship between sentiment about the economy and judgments of presidential performance. An analysis of quarterly presidential approval across heterogeneous education cohorts for the period extending from 1978 to 2008 shows that Americans with relatively low levels of educations respond significantly to past economic performance in evaluating the president. Americans with relatively high levels of education evaluate presidents in terms of expected, long-run economic performance. Aggregate presidential approval contains multiple political responses to various economic signals; it is shaped by the views of both "peasants" and "bankers."

There is substantial evidence that the American public's evaluation of the economy influences its evaluations of the president. However, there is also substantial disagreement among scholars of public opinion about just how the economy matters when the mass public is asked whether it approves or disapproves of the job the president is doing. One view is that Americans are "peasants" who evaluate their president in terms of the past (retrospective) performance of the economy (e.g. Fiorina 1981; Key 1966; Norpoth 1996a). An alternative view is that Americans are "bankers" who evaluate the president in terms of anticipated (prospective) economic performance (MacKuen, Erikson, and Stimson 1992, 1996).

These alternatives proceed from different theoretical assumptions about citizens' ability to acquire and evaluate information about the economy and the ways that Americans *as a group* use information about the economy to evaluate presidents. Yet, Americans vary widely *as individuals* in political knowledge, political sophistication, and educational attainment. Characterizing the public as a set of either peasants *or* bankers ignores the strong probability that the American public includes both peasants *and* bankers.

We argue that the kind of economic judgments that influence Americans evaluations of the president vary systematically as a function of formal education, which is positively associated with political knowledge and political sophistication (Barabas, Jerit, Pollock, and Rainey 2014; Galston 2004; Granato and Krause 2000; Verba, Schlozman, and Brady 1995). Americans with less formal educations are apt to acquire less political information, to experience greater difficulty in connecting information to political objects, and to be more reliant on experience or past performance to formulate evaluations of the president (Gomez and Wilson 2001, 2003, 2006). The less educated, politically informed, and sophisticated are more likely to evaluate presidents in terms of past performance. Conversely, the more educated,

politically informed, and sophisticated are more likely to use economic expectations to inform their evaluations of the president.

The informational and behavioral consequences of formal education create important micro-level heterogeneity in the relationships among past economic performance, expected economic performance, and evaluations of the president. This heterogeneity adds complexity into macro-level dynamics in presidential approval, which averages together individual judgements that are variously based on both forward-looking and backward-looking economic perceptions. This means that overall presidential approval is associated with both experienced and expected economic performance. This has been indirectly observable in the approval literature as scholars have found evidence for the primacy of both economic retrospections and prospectives by applying different methods of statistical analysis to the approval time series. However, the consequences of variance in formal education for presidential approval ought to be more directly observable by disaggregating approval by education level. The resulting education sub-group approval time series should be relatively more or less influenced by economic expectations versus economic retrospections as a function of the included individuals' level of education.

We assess this theory of heterogeneous presidential approval by estimating dynamic models of quarterly presidential approval (measured by the Gallup Poll) disaggregated by levels of formal education as a function of components of the Index of Consumer Sentiment dealing with sociotropic evaluations of economic tides in the past and expectations of economic conditions in the future. The model estimates support our theoretical claims. Presidential approval among Americans who have attended college is significantly associated with their long-term economic expectations and not with their retrospective judgments of the economy. Presidential approval among high school graduates is significantly associated with both

retrospective judgements of economic performance and long-term economic expectations. Presidential approval among Americans who ended their formal education before completing high school is significantly associated with retrospective economic judgments and not with views about future economic performance.

This analysis sheds some light on the divergent results identified by various analyses of aggregate presidential approval. Americans see presidential performance through lenses that are shaped by their educational attainment and factors related to the acquisition of formal education. Some look forward; others look backward. Thus, aggregate presidential approval contains multiple political responses to various economic signals; it is shaped by the views of both “peasants” and “bankers.” Though it remains unclear why differing analytic and methodological strategies employed by scholars of presidential approval have emphasized one or another of these, it is not surprising that there is evidence of multiple economic perspectives to influence a single macro-level phenomenon.

PRESIDENTIAL APPROVAL AND ECONOMIC PERCEPTIONS

An active presidency is a central feature of modern American politics and government. Likewise, presidential approval—Americans’ collective judgment about the president’s performance in office—is one of the most informative and consequential dimensions of public opinion for the nation’s elections and governance. Among other things, higher presidential approval is associated with increased prospects for the president or his party to remain in office (Abramowitz 2008), increased rates of victory for the president’s party in congressional elections (Newman and Ostrom 2002), greater success for the president’s legislative proposals (Canes-Wrone and DeMarchi 2002), and more “boldness” in both the president’s domestic and foreign policy agendas (Marra, Ostrom, and Simon 1990). Understanding the dynamics of presidential approval is therefore central to understanding American national politics.

Mueller's (1970) pioneering account of rally events and trends in presidential approval established a basic template for understanding the dynamics of Americans' judgments of presidential performance. His approach included modeling some measure of nationally aggregated presidential approval as a function of past or present macroeconomic conditions, rally events and scandals, and some dynamic property of the presidential approval time series (e.g. Chappell and Keech 1985; Kernell 1978; Monroe 1984; Norpoth 1996a; MacKuen 1983; Ostrom and Simon 1985; Stimson 1976). The large literature on presidential approval has identified a variety of systematic factors that influence Americans' evaluations of their president, including: responses to wars and foreign policy crises (Mueller 1970, 1973), presidential personality (Barber 1972, Newman 2003), and charisma (Edwards 2002). Yet, across this body of research, scholars are almost unanimous in concluding that presidential approval is related to the nation's economic performance (e.g. Clarke and Stewart 1994; Norpoth 1996a, 1996b; MacKuen, Erikson, and Stimson 1992, 1996, 2002)

Despite the evidence of a link between economic performance and presidential approval, there remains debate about exactly how evaluations of the economy translate into evaluations of the president. One view is that Americans lean on retrospective evaluations of actual economic performance to judge the president (e.g. Norpoth and Yantek 1983; Mueller 1970; Norpoth 1996a, 1996b; see also Key 1966; Kramer 1971; Tufte 1978 on economic retrospections in presidential voting). While early studies of presidential approval assumed that economic judgements of the president were backward-looking, more recent statements of this perspective articulate a theory of mass political behavior that emphasizes the strong influence of partisanship over economic expectations and the resulting endogeneity between approval and views of the future economy.

Norpoth (1996a), for example, argues that individuals' expectations of future economic conditions are too strongly related to past economic performance and too greatly colored by affective biases to inform evaluations of presidential performance. In particular, individual evaluations of the economy are highly contaminated by partisanship. This is especially true for views of the future economy, which are less constrained by reality. Thus, the association between approval and retrospective economic judgments represents the influence of events on judgments of the president while the association between approval and prospective economic judgments are artifacts of partisan coloring economic expectations. Norpoth concludes that Americans judge the president in terms of "things done" and not "things to come" (1996a, p. 777).

An alternative is that Americans rely on expectations about future economic performance when formulating their views of the president (MacKuen, Erikson, and Stimson 1992, 1996; Erikson, MacKuen, and Stimson 2002; see also Lockerbie 1991 on prospective economic judgements' influence on voting). These scholars point to evidence that evaluations of past economic performance are not strongly related to evaluations of future economic performance (Conover, Feldman, and Knight 1987; Kellstedt, Linn, and Hannah 2015; Kuklinski and West 1981). They argue that this independence shows that Americans evaluate the future by rationally anticipating the consequences of current economic policy choices for future economic conditions rather than simply extrapolating from the past. In turn, they argue that a sophisticated observer of the president should evaluate him on the basis of his policy choices' effects on the long-run performance of economy (as a "banker") rather than its past performance (as a "peasant"). As a result, Americans' evaluations of the president show "little gratitude for past prosperity independent of future economic promise" (MacKuen, Erikson, and Stimson 1992, p. 598).

The debate between these two theoretical perspectives has often turned on issues of time series econometrics with different methods yielding competing conclusions about whether aggregate presidential approval's association with the subjective economy is forward looking, backward looking, or both. For example, Norpoth's (1996a) Box-Jenkins estimation strategy shows clear evidence for the primacy of economic retrospections for presidential approval (see also Norpoth 1996b). In contrast, MacKuen, Erikson, and Stimson's (1992) lagged dependent variable models of approval estimated by ordinary least squares shows clear evidence for the view that economic prospections matter most for approval (see also MacKuen, Erikson, and Stimson 1996). Clarke and Stewart (1994) suggest an additional method for estimating the competing effects of economics retrospections and prospections. They claim that the presidential approval time series is nonstationary and that an error correction model of the differenced approval series yields more correct estimates of the long-run effects of subjective economic judgments on presidential approval. Applying this method, Clarke and Stewart (1994) conclude that both retrospections and prospections influence presidential approval.

BANKERS OR PEASANTS, OR BANKERS AND PEASANTS? HETEROGENEITY IN PRESIDENTIAL APPROVAL

The debate over the nature of the role of economic judgements in presidential approval touches on important questions about the influences of identities over behavior and individuals' political sophistication and awareness. Disagreement about the role of economic judgements in evaluations of the president has also generated a related debate about the best way to model the presidential approval time series. Despite the substantial theoretical and methodological differences among these studies, they all rely on analyses of aggregate public opinion in order to make inferences about Americans' individual political behavior. While this approach

generates valuable analytical leverage (e.g. Kramer 1971), it also implies that Americans are homogenous in their use of judgments about the economy to evaluate the president.

Yet, citizens vary widely in their levels of formal education, political information, and political sophistication (e.g. Converse 1964; Delli Carpini and Keeter 1996; Luskin 1987). Moreover, there are strong reasons to suspect that this variance may be associated with different ways of using economic perspectives to evaluate the president. First, there is much evidence that citizens with relatively higher levels of political awareness and political sophistication are generally more likely to receive and process political information, understand complex political concepts and “hard” political issues, understand the connections between particular issue positions and policy outcomes, respond to changes in elite political behavior, and be able to relate general political knowledge to concrete political choices (see e.g. Carmines and Stimson 1980, 1989; Converse 1964; Ellis and Ura 2011; Jacoby 1991; Luskin 1990; Ura and Ellis 2008; Zaller 1992).

Formal education likewise corresponds to important differences in political behavior. The study of the effect of education and its relationship with political behavior has a long history (see e.g. Campbell 1960; Converse 1964; MacKuen 1984). At the individual level, formal education is often positively correlated with political involvement and political sophistication (Barabas, Jerit, Pollock, and Rainey 2014; Verba, Schlozman, and Brady 1995; Galston 2004; Granato and Krause 2000). At the aggregate level, education is often used as a “proxy variable for information heterogeneity” in the electorate, with those possessing more years of formal education being both better informed and better able to handle more taxing, or abstract concepts (Granato and Krause 2000: p. 535; see also Ellis and Ura 2011; MacKuen 1984).

Moreover, the informational and cognitive advantages associated with political sophistication, formal education, and their correlates have important consequences for

presidential voting. There is convincing evidence that variance in political sophistication leads to heterogeneity in the ways that citizens use economic judgments to make presidential vote choices. Although voters at all levels of political sophistication make a connection between the state of the national economy and the candidates running for president, only more sophisticated voters are able to make the more “distal and abstract attribution” of changes in their personal circumstances to changes in public policy (Gomez and Wilson 2001, p. 901). As a result, less sophisticated voters cast ballots in American national elections on the basis of perceived changes in aggregate economic conditions alone, while more sophisticated voters are influenced by both judgements about the performance of the nation’s economy and changes in their own personal economic situation (Gomez and Wilson 2001, 2003, 2006).

The influence of political information, political sophistication, and formal education—which are strongly related at the individual level—for political behavior suggests important theoretical insights into the problem of economic perceptions in presidential approval. In particular, variance in knowledge, sophistication, and education should be associated with heterogeneity in Americans’ ability to formulate and relate relatively “distal and abstract” expectations of the nation’s future economic performance to their evaluations of the president. More educated, well-informed, and sophisticated individuals are more apt to be exposed to information about the nation’s long-term economic prospects, to be able to connect information about the economy to relevant political objects and actors, and to sample considerations pairing economic expectations with the president when asked to judge his performance in office (Zaller 1992). In contrast, the less educated, sophisticated, and informed, on average, have greater difficulty in obtaining information about the expected performance of the national economy and in connecting whatever information they obtain to political actors. As a result, considerations

relating future economic performance to the sitting president are less available for sampling while formulating a survey response.

These differences in individuals' abilities to receive, process, and access information forms the basis of different foundations for presidential approval. The less educated, politically informed, and sophisticated will be more likely to evaluate presidents in terms of the observed, past performance of the economy. The more educated, politically informed, and sophisticated will be more likely to use information about the likely state of the future economy to inform their evaluations of the president. To use the literature's metaphor, individuals with greater information, sophistication, and education are more likely to be "bankers," while those with lesser information, sophistication, and education are more likely to be "peasants."

ASSESSMENT: DATA AND METHODS

To assess the extent of heterogeneity in the role of economic perceptions in shaping presidential approval, we disaggregate presidential approval by three levels of formal education—grade school education, high school education, and college—and model each as a function of the group's subjective sociotropic retrospections and sociotropic expectations about the performance of the United States economy controlling for current (objective) macroeconomic conditions, rally events and scandals, as well as fixed effects for individual presidents. If our theoretical claims are correct, we should observe differences among the associations between the groups' approval time series and their subjective views of the economy. Presidential approval among the least educated group (grade school), which is also likely to be the least politically sophisticated and informed cohort, should be most strongly associated with views about the past performance of the economy. Presidential approval among the most educated group (college), which is also likely to be the most politically sophisticated and informed cohort, should be most strongly associated with views about the expected

performance of the economy. Finally, presidential approval among the middle education group (high school) should occupy a middle position in terms of economic perceptions. The middle cohort's approval series should be more strongly associated with economic retrospections than the most educated group's approval series, but less so than the least educated group's approval series. The middle group's approval series also should be more strongly associated with economic expectations than the least educated group's approval series, but less so than the most educated group's approval series.

To measure presidential approval, we drew on Gallup surveys stored electronically at the Roper Center Public Opinion Archives to compute the percentage of respondents who approved of the way the president is handling his job among three (self-reported) education cohorts: those who did not finish high school (grade school), those who completed high school but never attended college (high school), and those who attended at least some college (college). We compiled these into quarterly indicators of presidential approval for each group from 1978 (when companion economic sentiment data become available) through 2008. Figure 1 illustrates these time series.

FIGURE 1 ABOUT HERE

To measure economic retrospections and prospectives, we utilize component items of the Survey of Consumers Index of Consumer Sentiment, collected by the Survey Research Center at the University of Michigan. In particular, we use two items related to respondents' views of past and future conditions for business in the United States to measure the perceived past and future health of the United States economy:

1. *Business Retrospections*: "Would you say that at the present time business conditions are better or worse than they were a year ago?"

2. *Long Term Business Expectations*: “Looking ahead, which would you say is more likely—that in the country as a whole we’ll have continuous good times during the next five years or so, or that we will have periods of widespread unemployment or depression, or what?”

Since 1978, the ICS and its components have been reported for various demographic subgroups, including education cohorts, in addition to national averages. Therefore, we were able to create a quarterly time series for each of the items broken down by education level: grade school, high school, and college.¹ The answers to these items are aggregated quarterly within education groups. The scores are computed by taking the favorable replies minus the unfavorable replies and then adding 100. Thus, a higher score (above 100) indicates a more favorable response while a lower score (below 100) indicates a less favorable response.

Table 1 reports descriptive statistics for the resulting economic sentiment series. The data show that less educated Americans are generally less enthusiastic about the past and more pessimistic about the future than more educated Americans. The business retrospections index scores are 12.65 points lower, on average, among those with a grade school education than among those with at least some college. The difference is even more stark when evaluating the future. The business expectations index scores are 27.65 points lower, on average, among those with a grade school education than among those with at least some college. Additionally, there is somewhat less variance in economic evaluations among the lower educated cohorts. This is more pronounced for economic retrospections than prospecting, though. The standard deviation of the economic retrospections scores for the grade score cohort is roughly thirteen points lower than the college-educated cohort’s standard deviation. The between-group differences in the variance in economic prospecting scores are more modest, though. The

standard deviation of the grade school cohort’s economic expectations score is only about four points less than the college cohort’s expectations score’s standard deviation.

TABLE 1 ABOUT HERE

Following MacKuen, Erikson, and Stimson (1992), we identify indicators of objective economic indicators (inflation and change in unemployment) as well as time series indicating events that “left a major impact on the quarter’s average reading” (608).² With these data in hand, we again follow MacKuen, Erikson, and Stimson (1992) in estimating Koyck lagged dependent variable (LDV) models for each education cohort’s quarterly presidential approval as a function of lagged approval (t-1) plus the current values of the items from the Index of Consumer Sentiment, current values of the objective economic indicators of inflation and change in unemployment, and controls for presidential administrations and political events.³

The bivariate form of this model is:

$$y_t = \beta_0 + \beta_2 y_{t-1} + \beta_1 x_t + \varepsilon_t.$$

We estimate the four presidential approval models as a system of seemingly unrelated regression equations.

We adopt with MacKuen, Erikson, and Stimson’s (1992) approach for several reasons. First, this framework has produced the strongest evidence for a prospective view of presidential approval. Using this approach leaves us to look for evidence of retrospective economic judgments weighing on presidential approval where we are least likely to find them. The LDV setup is also simple and transparent with useful econometric properties. This model is appropriate for our analysis because the independent variables are “hypothesized to affect the dependent variable immediately and then leave a residue that declines gradually over time” (p. 601, see also MacKuen, Erikson, and Stimson 1996). By using a lagged dependent variable model, we are able to consider the effects of the explanatory variables on presidential approval

in previous quarters without having to include their past values in the equation. The autoregressive error component is captured in the coefficient for lagged approval rather than in the residuals. While this model may introduce bias and inconsistency into the results with the inclusion of the lagged dependent variable, it is a more conservative test of our hypotheses in that it may lead us to commit Type II, but not Type I, errors in our analysis (Keele and Kelly 2005).

RESULTS AND ANALYSIS

The estimates reported in Table 2 provide support for our theory of heterogeneous presidential approval. The association between Americans' evaluations of the U.S. economy and their evaluations of the president vary systematically as a function of formal education, which is strongly correlated with political knowledge and political sophistication. At the lowest levels of formal education, Americans' evaluations of the president are most strongly influenced by their views of past economic performance. At increasingly higher levels of education, presidential approval becomes more strongly associated with individuals' expectations about future economic performance. Individuals with greater information, sophistication, and education, as a group, behave more like "bankers" while those with lesser information, sophistication, and education behave more like "peasants."

TABLE 2 ABOUT HERE

Among the least educated Americans—those who did not complete high school—economic expectations have little bearing on presidential approval. The coefficient for long-run business expectations on grade school presidential approval is substantively small and not statistically distinguishable from zero. Instead, the least educated Americans' perceptions of past economic performance is a positive and significant predictor of that group's evaluation of the president. Each point increase in the bottom education cohort's business retrospection at

time t predicts a contemporary increase of 0.08 points in its approval of the president. A one standard deviation increase in grade school business retrospections (28.41 points) predicts an increase of just over two and a half points (2.27), or slightly less than one fifth of a standard deviation of that group's presidential approval series.

In contrast, the model of the high school cohort's approval series shows that it is significantly associated with both economic retrospections and economic expectations. High school graduates' long-term business expectations are significantly and positively associated with their approval of the president. Each point increase in high school long-term business expectations predicts an increase of 0.11 points in approval. Each standard deviation increase in high school graduates' expectations of business conditions in the long-term (18.30 points) predicts an increase of 0.14 standard deviations in the group's presidential approval.

High school graduates' evaluations of the past performance of the economy are also positively and significantly related to their presidential approval. Each point increase in the high school cohort's business retrospection index score predicts an increase of 0.05 points in its approval of the president. Each standard deviation increase in high school graduates' expectations of business conditions in the long-term (36.93 points) predicts an increase about 0.13 standard deviations in the group's presidential approval.

As expected, presidential approval among those who have attended at least some college exhibits the clearest association with its views of the likely state of the future economy. The predicted effect of long-term business expectations on the group's presidential approval time series is positive and significant. Each point increase in the college cohort's long-term business expectations score at t predicts a contemporaneous increase of 0.17 points in the group's approval of the president. A standard deviation's increase in the college cohort's business expectations score (19.28 points) predicts an increase of 0.26 standard deviations in the group's

presidential approval. In contrast, the association between college educated Americans' retrospective economic evaluations and presidential approval is statistically indistinguishable from zero.

Since our principal theoretical claims involve differences in the magnitude of the groups' use of either prospective or retrospective economic judgments to evaluate the president, an important test of our theory involves an assessment of the significance of the difference in the predicted effects of forward-looking and backward-looking economic judgments between groups rather than between each coefficient and zero. Table 3 presents these results of these between-model hypothesis tests. Comparisons of the various model estimates provide support for our theoretical claim that increased formal education, which is closely linked to greater political knowledge and political sophistication, is associated with an increasingly prospective take on presidential approval.

TABLE 3 ABOUT HERE

The differences among the model estimates also support our theoretical claims. All of the between group differences are correctly signed—lower education cohorts are uniformly more backward-looking and less forward-looking than higher education cohorts. These differences are clearest in the comparisons between the highest and lowest education groups. Presidential approval among those with at least some college education is less strongly associated with that group's views about the past performance of the economy than it is among those without a high school diploma ($p=0.03$). Likewise, presidential approval among those with at least some college education is more strongly associated with that group's views about the likely state of the future economy than it is among those without a high school diploma ($p=0.01$).

The data also show that the high school cohort occupies a middle position in terms of the associations between perceptions of the economy and presidential approval. The estimated effect of economic retrospections on the high school group's presidential approval is significantly smaller than the predicted effect of retrospections for the college group. It is also larger than the predicted effect of retrospections for the grade school group, but not significantly so. Conversely, the estimated effect of economic prospections on the high school group's evaluations of the president is smaller than the predicted effect of prospections for the college group and larger than the predicted effect of prospections for the grade school group. Neither of these differences is significantly different than zero, though.

Despite the observed heterogeneity in the associations between subjective evaluations of the economy and presidential approval, the three education cohorts' presidential approval series respond similarly to other predictors. There is no significant relationship between any of the three presidential approval time series and the objective indicators of economic performance, contemporaneous inflation and the first difference of unemployment. However, all three approval series are positively and significantly associated with rallies and scandals. Indeed, the predicted effect of a one unit increase in the rally event count is about five points for all groups. Finally, we also note that the estimated strength of the various series autoregressive processes are comparable, though the college educated cohort's approval series exhibits somewhat less serial dependence than the other two.

DISCUSSION AND CONCLUSIONS

The model estimates provide support for our prediction that formal education is associated with variance in the dynamics of presidential approval. The data show a less retrospective orientation in evaluating the president and a greater prospective orientation as one looks from the least educated Americans to the most educated Americans. However, the

data do not yield evidence of crisp difference from one education group to the next. Instead, they show a continuum of behavior. As formal education increases, Americans gradually turn their gaze from past economic performance to expected economic conditions when evaluating the president.

These results have several implications. First, aggregate presidential approval's association with the economy is neither strictly forward looking nor strictly backward looking. The American public contains groups of "peasants" and "bankers" as well as a large strata of the public that defies these categories by considering both the past and future in evaluating the president. Aggregate judgments of presidential performance are products of all these currents, and both retrospective and prospective views of the economy echo in presidential approval at the same time (Clarke and Stewart 1994). It is therefore entirely sensible that different analytical or methodological approaches to modeling the presidential approval time series may variously identify or emphasize its prospective (MacKuen, Erikson, and Stimson 1992, 1996) or retrospective (Norpoth 1996a, 1996b) properties.

Additionally, the data provide further evidence that formal education and its correlates influence the kind of political information individuals use to make political judgments. Individuals with relatively high levels of formal education, who are likely to be highly politically informed and politically sophisticated, are more apt to relate expectations of the nation's expected, long-run economic performance to their evaluations of the president compared to those with relatively low levels of formal education, who more greatly emphasize observations of recent economic performance (Gomez and Wilson 2001, p. 901). This result is consistent with prior research showing that more politically sophisticated individuals tend to formulate presidential vote choices by ascribing credit or blame for changes in their personal

circumstances to more distant and abstract actors than less sophisticated voters (Gomez and Wilson 2001, 2003, 2006).

The identification of additional complexity in presidential approval also informs a more complete portrait of American national government. Presidential approval is often taken as an indicator of the president's public political capital. Our analysis emphasizes the point that presidential approval, like any aggregate tally of political support, lumps together support from various constituencies, socioeconomic groups, and levels of political awareness and ability. The extent to which any given president's support may be robust or fragile depends, in part, on the composition of supporters. A president whose support comes disproportionately from less educated and less politically sophisticated and knowledgeable elements of the public holds a more unstable political position than a president whose enjoys greater support from groups that are more educated, sophisticated, and knowledgeable. Short-term economic fluctuations will have greater effect on evaluations of the president among the less educated, who are less attentive to expectations about unfolding trends. Presidents' ability to turn any given period of heightened popularity into a sustained effort to achieve a political purpose, therefore, may turn on the composition of his base of support as much as his level of support at any given moment.

¹ The Index of Consumer Sentiment and its components are reported for multiple education groups. For our purposes, to create comparable measures across presidential approval and economic perceptions, we averaged responses for the index items for the categories "some college," "college degree," and "grad school" into one category: college educated.

² The resulting events time series is coded for Camp David Accords (1978:4=1), Carter's Iran Crisis (1979:4=2, 1980:1=1, and 1981:2=-1), the Reagan assassination attempt (1981:2=1), the Granada invasion (1983:4=1), Reagan's second inauguration (1985:1=1), the Iran-Contra scandal (1986:4=-1), the fall of the Berlin Wall (1989:4=1), the Iraqi Invasion of Kuwait

(1990:3=1), the first Gulf War (1991:1=3, 1991:2=2, 1991:3=1), the Monica Lewinsky episode and the impeachment of President Clinton (1998:1-1999:1=1), Clinton's second inauguration (1997:1), the 9/11 terrorist attacks and the early war in Afghanistan (2001:3=1; 2001:4=3, 2002:1=2, 2002:2-2002:4=1), the start of the second Iraq War (2003:2=3, 2003:3=2, 2003:4=1), the revelation of abuse at Abu Ghraib (2004:2=-1), Bush's second inauguration (2005:4=1), and Hurricane Katrina (2005:4=-1). It takes a value of zero in all other quarters.

³We exclude the first quarter of each new president's first term to avoid estimating a model of approval that expresses an incoming president's approval as a function of his predecessor's approval through the lagged dependent variable.

REFERENCES

- Abramowitz, Alan I. 2008. "Forecasting the 2008 Presidential Election with the Time-for-Change Model." *PS: Political Science & Politics* 41(04): 691–695.
- Barabas, Jason, Jennifer Jerit, William Pollock, and Carlisle Rainey. 2014. "The Question(s) of Political Knowledge." *American Political Science Review* 108(4): 840–855.
- Barber, James David. 1972. *The Presidential Character: Predicting Performance in the White House*. Englewood Cliffs: Prentice Hall.
- Campbell, Angus, Philip E. Converse, Warren E. Miller, and Donald E. Stokes. 1960. *The American Voter*. New York: John Wiley.
- Canes-Wrone, Brandice, and Scott De Marchi 2002. "Presidential Approval and Legislative Success." *Journal of Politics* 64(2): 491–509.
- Carmines, Edward G. and James A. Stimson. 1980. "The Two Faces of Issue Voting" *American Political Science Review* 74(1): 78-91.
- Carmines, Edward G., and James A. Stimson. 1989. *Issue Evolution: Race and the Transformation of American Politics*. Princeton: Princeton University Press.
- Chappell, Henry W., and William R. Keech 1985. "A New View of Political Accountability for Economic Performance" *American Political Science Review* 79(1): 10-27.
- Clarke, Harold D. and Marianne C. Stewart. 1994. "Prospections, Retrospections, and Rationality: The "Bankers" Model of Presidential Approval Reconsidered." *American Journal of Political Science* 38 (November): 1104-1123.
- Harold D. Clarke, Marianne C. Stewart, Mike Ault and Euel Elliott. 2005. "Men, Women and the Dynamics of Presidential Approval" *British Journal of Political Science* 35(1): 31-51.
- Cohen, Jeffrey E. 2004. "Economic Perceptions and Executive Approval in Comparative Perspective." *Political Behavior* 26 (March): 27-43.

- Conover, Pamela Johnston, Stanley Feldman, and Kathleen Knight. 1987. "The Personal and Political Underpinnings of Economic Forecasts." *American Journal of Political Science* 31(3): 559-583.
- Converse, Philip E. 1964. "The Nature of Belief Systems in Mass Publics." in *Ideology and Discontent*. New York: Free Press, pp. 206-261.
- Delli Carpini, Michael and Scott Keeter. 1996. *What Americans Know About Politics and Why It Matters*. New Haven: Yale University Press.
- Edwards, George C. 2002. "Does the Messenger Matter? The Role of Charisma in Public Leadership." *Congress and the Presidency* 29 (Spring): 25-46.
- Edwards, George C. 1990. *Presidential Approval: A Sourcebook*. Baltimore: Johns Hopkins University Press.
- Ellis, Christopher R. and Joseph Daniel Ura. 2011. "United We Divide? Education, Income, and Heterogeneity in Mass Partisan Polarization" in Peter Enns and Christopher Wlezien eds. *Who Gets Represented?* New York: Russell Sage Foundation, 61-92.
- Erikson, Robert S., Michael B. MacKuen, and James A. Stimson. 2002. *The Macro Polity*. Cambridge: Cambridge University Press.
- Fiorina, Morris. 1981. *Retrospective Voting in American National Elections*. New Haven: Yale University Press.
- Galston, William A. 2004. "Civic Education and Political Participation." *PS: Political Science & Politics* 37(02): 263-266.
- Gomez, Brad T., and J. Matthew Wilson. 2001. "Political Sophistication and Economic Voting in the American Electorate: A Theory of Heterogeneous Attribution." *American Journal of Political Science* 45 (4): 899-914.

- Gomez, Brad T. and J. Matthew Wilson. 2003. "Causal Attribution and Economic Voting in American Congressional Elections." *Political Research Quarterly* 56(3): 271-282.
- Gomez, Brad T. and J. Matthew Wilson. 2006. "Cognitive Heterogeneity and Economic Voting: A Comparative Analysis of Four Democratic Electorates." *American Journal of Political Science* 50(1): 127-145.
- Granato, Jim and George A. Krause. 2000. "Information Diffusion Within the Electorate: The Asymmetric Transmission of Political-Economic Information." *Electoral Studies* 19: 519-537.
- Gronke, Paul and Brian Newman. 2003. "FDR to Clinton, Mueller to ?: A Field Essay on Presidential Approval." *Political Research Quarterly* 56 (December): 501-515.
- Hibbs, Douglas A., R. Douglas Rivers, and Nicholas Vasilatos. 1982. "The Dynamics of Political Support for American Presidents Among Occupational and Partisan Groups." *American Journal of Political Science* 26 (May): 312-332.
- Jacoby, William G. 1991. "Ideological Identification and Issue Attitudes" *American Journal of Political Science* 35(1): 178-205.
- Keele, Luke, and Nathan J. Kelly .2006. "Dynamic Models for Dynamic Theories: The Ins and Outs of Lagged Dependent Variables" *Political Analysis* 14(2): 186-205.
- Kellstedt, Paul, Suzanna Linn, and A. Lee Hannah. 2015. "The Usefulness of Consumer Sentiment: Assessing Construct and Measurement." *Public Opinion Quarterly* 79(1): 181-203.
- Kernell, Samuel. 1978. "Explaining Presidential Popularity. How Ad Hoc Theorizing, Misplaced Emphasis, and Insufficient Care in Measuring One's Variables Refuted Common Sense and Led Conventional Wisdom Down the Path of Anomalies." *American Political Science Review* 72(2): 506-522.

- Key, V.O. 1966. *The Responsible Electorate*. Cambridge: Harvard University Press.
- Kramer, Gerald H. 1971. "Short-Term Fluctuations in U.S. Voting Behavior, 1896-1964."
American Political Science Review 65(01): 131-143.
- Kuklinski, James H. and Darrell M. West. 1981. "Economic Expectations and Voting Behavior in United States House and Senate Elections." *American Political Science Review* 75(02): 436-447.
- Lockerbie, Brad. 1991. "Prospective Economic Voting in U. S. House Elections, 1956-88."
Legislative Studies Quarterly 16(2):239-261.
- Luskin, Robert C. 1987. "Measuring Political Sophistication." *American Journal of Political Science* 31(3): 856-899.
- Luskin, Robert C. 1990. "Explaining Political Sophistication" *Political Behavior* 12(4): 331-361.
- MacKuen, Michael B. 1983. "Political Drama, Economic Conditions, and the Dynamics of Presidential Popularity" *American Journal of Political Science* 27:165-192.
- MacKuen, Michael. B. 1984. "Exposure to Information, Belief Integration, and Individual Responsiveness to Agenda Change." *American Political Science Review* 78 (June): 372-391.
- MacKuen, Michael B., Robert S. Erikson, and James A. Stimson. 1992. "Peasants or Bankers? The American Electorate and the U.S. Economy." *American Political Science Review* 86 (September): 597-611.
- MacKuen, Michael B., Robert S. Erikson, and James A. Stimson. 1996. "Presidents and the Prospective Year: Comment." *Journal of Politics* 58 (August): 793-801.
- Marra, Robin F., Charles W. Ostrom, and Dennis M. Simon 1990. "Foreign Policy and Presidential Popularity Creating Windows of Opportunity in the Perpetual Election."
Journal of Conflict Resolution 34(4): 588-623.

- Mueller, John. 1970. "Presidential Popularity from Truman to Johnson." *American Political Science Review* 64(01):18-34.
- Mueller, John. 1973. *War, Presidents, and Public Opinion*. New York: Wiley.
- Monroe, Kristen R. 1984. *Presidential Popularity and the Economy*. New York: Praeger.
- Monroe, Kristen R. and Dona Metcalf Laughlin. 1983. "Economic Influences on Presidential Popularity among Key Political and Socioeconomic groups: A Review of the Evidence and Some New Findings." *Political Behavior* 5: 309-345.
- Newman, Brian. 2003. "Integrity and Presidential Approval, 1980-200." *Public Opinion Quarterly* 67: 335-367.
- Newman, Brian, and Charles Ostrom 2002. Explaining Seat Changes in the U.S. House of Representatives, 1950-98. *Legislative Studies Quarterly* 27(3): 383-405.
- Norpoth, Helmut. 1996a. "Presidents and the Prospective Year." *Journal of Politics* 58 (August): 776-792.
- Norpoth, Helmut. 1996b. "Presidents and the Prospective Year: Rejoinder." *Journal of Politics* 58 (August): 802-805.
- Norpoth, Helmut, and Thom Yantek. 1983. "Macroeconomic Conditions and Fluctuations of Presidential Popularity: The Question of Lagged Effects." *American Journal of Political Science* 27(4): 785-807
- Ostrom, Charles W., and Dennis M. Simon. 1985. "Promise and Performance: A Dynamic Model of Presidential Popularity" *American Political Science Review* 79(2)334-358.
- Stimson, James A. 1976. Public Support for American Presidents: A Cyclical Model. *Public Opinion Quarterly* 40(1):1-21.
- Tufte, Edward R. 1978. *Political Control of the Economy*. Princeton: Princeton University Press.

- Ura, Joseph Daniel and Christopher R. Ellis. 2008. "Income, Preferences, and the Dynamics of Policy Responsiveness." *PS: Political Science and Politics* 41(4): 785-794.
- Verba, Sidney, Kay Lehman Schlozman, and Henry E. Brady. 1995. *Voice and Equality: Civic Volunteerism in American Politics*. Cambridge, MA: Harvard University Press.
- Weyland, Kurt. 1998. "Peasants or Bankers in Venezuela? Presidential Popularity and Economic Reform Approval, 1989-1993." *Political Research Quarterly* 51 (June): 341-362.
- Zaller, John. 1992. *The Nature and Origins of Mass Opinion*. Cambridge: Cambridge University Press.

Table 1: Descriptive Statistics for Quarterly ICS Business Components for Three Education Cohorts, 1978-2008

<u>Business Retrospections</u>		<u>Mean</u>	<u>Std. Dev.</u>	<u>Range</u>
Grade School	84.80	28.41	130.56	
High School		92.48	36.93	141.07
College		97.45	41.25	162.62
<u>Business Expectations</u>		<u>Mean</u>	<u>Std. Dev.</u>	<u>Range</u>
Grade School	71.82	15.16	73.95	
High School		84.61	18.30	85.66
College		99.47	19.28	92.95

Table 2: Quarterly Presidential Approval for Three Education Cohorts, 1978-2008

Predictors	Grade School	High School	College
<i>Economic Perceptions</i>			
Business Retropsections _t	0.08* (0.04)	0.05* (0.03)	0.00 (0.03)
Business Expectations _t	0.02 (0.04)	0.11* (0.05)	0.17* (0.06)
<i>Economic Conditions</i>			
Inflation _t	0.28 (0.51)	0.44 (0.42)	0.32 (0.41)
ΔUnemployment _t	3.27 (2.62)	3.81 (2.36)	1.68 (2.13)
<i>Events</i>			
Rallies and Scandals _t	5.30* (1.09)	4.96* (1.12)	5.70* (1.00)
<i>Dynamics and Constant</i>			
Presidential Approval _{t-1}	0.72* (0.05)	0.71* (0.04)	0.60* (0.05)
Constant _t	-0.19 (7.01)	-5.98 (6.86)	-2.40 (6.56)
<i>Fit and Diagnostics</i>			
R ²	0.79	0.85	0.83
Breusch-Pagan X ²	p<0.01	p=0.01	p=0.76
Breusch-Godfrey LM	p=0.23	p=0.08	p=0.68

Note: Unless otherwise indicated, cell entries are seemingly unrelated regression coefficients (robust standard errors in parentheses). *p<0.05; one-tailed tests. Models also include unreported fixed effects for each president. The Breusch-Pagan test evaluates the null hypothesis of constant error variance. The Breusch-Godfrey Lagrange multiplier tests the null hypothesis of uncorrelated residuals. N=119 for all models.

Table 3: Estimated Between-Group Differences in Effects of Economic Perceptions on Presidential Approval

Business Retrospections		Business Expectations	
	Difference		Difference
Grade School-High School	0.03	Grade School-High School	-0.09
X^2	0.84	X^2	2.17
p	0.18	p	0.07
High School-College	0.03	High School-College	-0.06
X^2	3.65	X^2	1.00
p	0.03	p	0.16
Grade School-College	0.08	Grade School-College	-0.15
X^2	3.92	X^2	5.32
p	0.03	p	0.01

Note: The table reports the results of Wald X^2 tests of the null hypothesis of no difference in the estimated coefficients for Economic Retrospections and Economic Projections reported in Table 2 for each pair of education cohorts. p values are for one-tailed tests.

Figure 1: Presidential Approval by Education Cohort, 1978:1-2008:4

