

ECONOMIC CLASS AND POPULAR SUPPORT FOR FRANKLIN ROOSEVELT IN WAR AND PEACE

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Abstract History has judged FDR as one of America's greatest leaders in part because he maintained the public's confidence in seeing the nation through the travails of the Depression and World War II. During this era, the two most widely employed explanatory variables in contemporary presidential popularity scholarship—the economy and war—assumed their most extreme values of the twentieth century. Hence, not only is understanding Roosevelt's public support historically important, but it represents a valuable case for filling in our understanding of the opinion dynamics of presidential support more generally. Yet, surprisingly, Roosevelt's approval ratings have attracted little systematic scrutiny. Compiling time-series data from 1937 to 1943, partially disaggregated by economic class, we investigate FDR's popular support among different classes during both national crises. We find that Roosevelt's peacetime support divided along class lines, while during the war class divisions blurred. Roosevelt's support was indeed conditioned by external events, refracted through the interests of different societal groups. We conclude that public support for modern presidents should be similarly studied as the sum of opinions among heterogeneous constituencies.

During his 12 years in office, Franklin Roosevelt confronted two of America's greatest crises of the twentieth century: the Great Depression and World War II. Historians have judged Roosevelt's performance quite favorably, consistently ranking him among the nation's top five presidents and typically second

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only to Abraham Lincoln (Murray and Blessing 1983). According to these historical assessments, the nation desperately needed leadership and found it in FDR. Establishing a reservoir of public support early in his tenure enabled Roosevelt to spurn popular panaceas (e.g., the Townsend Plan and Huey Long's scheme for a "full lunchpail") and instead steer national policy toward far-sighted economic reforms and an internationalist foreign policy that anticipated the threat posed by Hitler.

Leadership may have come naturally to Roosevelt, as admiring biographers are wont to claim, but it certainly was not effortless nor was the president predestined to succeed. Until Pearl Harbor, partisan and ideological conflict never receded far from the nation's civic life, and whenever it flared up, Roosevelt found himself at the center of controversy (Sundquist 1973). Each policy initiative to deal with the Depression was greeted with derision from demagogues on both the left and right (Cole 1983). Every 2 years the national election became a referendum on the president's policies and performance. According to the history of this era (Burns 1956; Holcombe 1940; Leuchtenburg 1995; and many others) and contemporary social science (Cantril 1940; Cantril, Rugg, and Williams 1940; Katz 1941), the polarization in political rhetoric in Washington was reflected in the opinions of the American public. Indeed, from the mid-1930s until Pearl Harbor, the electorate arguably realigned its partisan loyalties more dramatically than at any other time in American history, and it did so almost exclusively on the basis of economic class. Reflecting a consensus view of realignment research, Sundquist (1973, p. 202) concluded, "the party system that emerged from the revolution of the 1930s reflected a pronounced class cleavage. Businessmen and professional men were preponderantly Republican; the working class predominantly Democratic . . . tight bonds were formed between organized labor and the Democratic party . . . [and] ties equally close if less formal and overt were formed between business organizations and the GOP."

Public support appears in all accounts to have been critical to Roosevelt's success. Yet we know little about how or how well he navigated through this shifting, polarized electorate to maintain a sufficiently broad base of support to govern effectively. Unlike the approval ratings for every subsequent president (Brace and Hinckley 1993; Kernell 1978; MacKuen 1983; Mueller 1970; Ostrom and Simon 1985; and many others), Roosevelt's public support has eluded systematic examination and instead remains shrouded in notions of mass psychology (Sanford 1951; Modigliani 1972). It is important to correct this deficiency, as Franklin Roosevelt's sustained popularity appears to defy the findings of current research suggesting that war and economic bad times invariably depress presidents' approval ratings. Explaining how Roosevelt maintained his popularity in a seemingly adverse environment may offer important insights into the dynamics of popular support for presidents more generally.

Among our primary concerns is the class composition of Roosevelt's sup-

port. To the extent that class divisions were present, did they influence how the public discerned and weighed national politics, the economy, and the war in assessing the president's performance? Similarly, did Americans' economic class mediate Roosevelt's efforts to win public backing not only for his New Deal, as might be expected, but also for his wartime policies? By analyzing FDR's shifting support coalitions (Mueller 1973) and, specifically, the changing evaluations of divergent economic classes (Ragsdale 1987), we seek to solve the puzzle of FDR's sustained popularity.

We begin in the next section by reviewing the relevant political events and conditions for the years 1937 to 1943, the period for which we have assembled the necessary data for performing our statistical analysis. We will draw upon this history both in specifying the explanatory variables and interpreting the results. Perhaps the main reason for the dearth of systematic analysis of Roosevelt's popularity has been the absence of readily available data. In section II we assemble a time series of Roosevelt approval ratings from archives and other historical sources that provide a nearly continuous, monthly record of Roosevelt's public support among different economic classes from October 1937 through May 1943. In sections III and IV we test the effects of various measures of the Depression, World War II, and Roosevelt's public activities on his approval ratings. Finally, in Section V, we conclude by considering the implications of our findings for understanding both President Roosevelt's leadership and, more generally, the dynamics of public evaluations of all presidents.

I. Roosevelt and Public Opinion, 1937-43

Despite handily winning reelection in 1936, Roosevelt's political problems only mounted during his second term (Burns 1956; Friedel 1990; Leuchtenburg 1995). The Court-packing scheme of early 1937 nullified any postelection honeymoon in Washington, if not across the country (Caldeira 1987). It was followed by a legislative proposal to strengthen the presidency (Dickinson 1997a, 1997b; Rozell 1997; Rozell and Pederson 1997) that appeared to confirm Republicans' charges that Roosevelt was preparing to install himself as a dictator (Burns 1956; Cole 1983; Tugwell 1957). At about the same time, the economic recovery stalled and the "Roosevelt recession" began. Finally, Roosevelt's failed effort to purge anti-New Deal congressional Democrats in the 1938 midterm election emboldened critics within his own party to launch a "no third term" movement for the 1940 Democratic nominating convention. In August 1939 Roosevelt's approval rating fell below 50 percent for the first time since George Gallup began routinely monitoring it several years earlier.¹

1. In this August 18-24, 1939, Gallup poll, Roosevelt's approval rating fell to 48 percent, the only recorded instance in his presidency in which his approval rating fell below 50 percent. This survey is not included in our series because the disaggregated data were unavailable. The lowest approval rating for FDR in our series is 53 percent, recorded in September 1938.

Against this backdrop of partisan strife and an eroding base, Roosevelt gingerly began cultivating the public's support for aid to Britain in its war against Germany. Whether judged by early public opinion surveys or administration policy, the president's efforts to rally public support for U.S. involvement in the war were not particularly successful. Polls consistently reported most respondents favoring isolationist policies. When asked which branch of government should control foreign policy, a majority of respondents consistently chose Congress.² Fearing a potential political backlash—especially among the large first- and second-generation German and Italian constituencies—Roosevelt proceeded cautiously in “the direction, and largely at the pace, they [the public] wanted to go” (Donovan, 1951, p. 316).

During the 1940 presidential campaign, Roosevelt carefully sought to broaden support for his pro-British, internationalist policies to create, in the words of James MacGregor Burns (1970, p. 36), a “new coalition” for his foreign policy. He studiously subordinated partisan appearances and associations by bringing prominent Republicans into government and by recasting his rhetoric to sound a new theme of America as “the arsenal of freedom.” Early in 1940 he appointed to the cabinet Frank Knox, the Republican vice presidential nominee in 1936 and a staunch internationalist. Then, in the summer, days after Republican leader Henry Stimson delivered a national radio address urging support of Britain, Roosevelt persuaded him to serve as his new Secretary of War. The next Spring both of these nationally prominent Republicans would actively and publicly promote the president's lend-lease legislation before Congress. Probably Roosevelt's biggest success in co-opting potential adversaries came in January 1941 when the recently defeated Republican presidential candidate, Wendell Wilkie, stood alongside him before newsreel cameras to announce his appointment as the president's personal emissary to Winston Churchill. By Pearl Harbor, FDR had largely completed refashioning his political support into a grand coalition by recruiting prominent Republican leaders to his internationalist policy and muting his partisan appeals.

Throughout his first two terms, Roosevelt behaved as though he fully appreciated both the necessity of public backing for his success and the effort required to sustain it. He devoted substantial time and effort to monitoring public opinion in its various forms, and openly regarded himself, with some justification, to be more in tune with the American public than any other politician in Washington (Steele 1985). Roosevelt routinely culled the nation's

2. Jacob (1940) reports that 67 percent of respondents in a September 1937 survey favored congressional control over U.S. neutrality policy, while 75 percent of respondents in a March 1938 survey—conducted after Hitler's annexation of Austria on March 12, 1938—asserted that U.S. neutrality laws should not be amended to increase the president's authority. Even in November 1939, 59 percent of respondents in a *Fortune* survey, conducted after the outbreak of the war in Europe, supported the prewar congressional decision to resist granting FDR the authority to decide to which countries the United States would sell war materials during times of war.

press and read large samples of the White House mail for early signs of political unrest. He enlisted "spies" (his expression) around the country who updated him with anecdotal reports on the views of ordinary citizens. Pre-saging the voracious appetite of modern presidents for polling data, FDR carefully studied whatever published and private poll reports he could obtain. During the war he encouraged privately commissioned opinion surveys and eagerly received confidential briefings on the results.³

Early in his first term, FDR introduced techniques of public communication that would remain in place throughout his 13 years in office and would be copied by his successors. The president kept the public and, in turn, Congress attuned to his policy agenda with his famous fireside chats.⁴ Moreover, he cultivated Washington journalists more assiduously than any president before or since. In 998 scheduled press conferences, Roosevelt offered correspondents hard news, in return for which they generally provided him and his policies favorable coverage (Kernell 1997).

During this era, the economy and war—the primary variables used to explain trends in modern presidents' popularity—assumed their most extreme negative values. One, then the other, dominated the nation's civic life as neither issue has since. Despite their lengthy and profoundly adverse effects on the lives of many citizens, neither the Depression nor World War II appears to have seriously damaged Roosevelt's popular support. From 1937 to 1943 he averaged an impressive 65 percent approval rating, and won reelection three times. Yet, the history reviewed here also describes a contentious political environment, at least until Pearl Harbor, as partisans and ideologues attacked the New Deal and the administration's interventionist inclinations (Twohey 1941).

This history leads us to suspect that public opinion divided along class lines during the prewar years. Below we test for this by partially disaggregating the time-series approval data for different income groups. If class divisions are present, they might appear as differences both in the levels of approval and in the strengths of the coefficients for the explanatory variables. What the Depression divided, Pearl Harbor presumably reunified. To the extent that this is so, we should find class differences generated by the Depression weakening as anti-New Deal, but pro-interventionist respondents, disproportionately represented in the upper- and middle-class groups, rallied behind the president and the war effort. Moreover, we shall look for the impact on public opinion of Roosevelt's attempt to assemble a bipartisan coalition for his in-

3. The Roosevelt Library includes numerous files and correspondence between Roosevelt aide Samuel Rosenman, Gerard Lambert, and Hadley Cantril discussing decisions to run national surveys and evaluating results.

4. Roosevelt went to great lengths—with much success—to influence the media's presentation of the war in Europe, in order to enhance public support for a proactive U.S. policy (Steele 1984). He even went so far as to threaten the radio industry that if it failed to serve the nation's interest, he would "make it behave" (Steele 1984, p. 76).

ternationalist posture almost 2 years before U.S. entry into the war. Finally, this history reveals a president who harnessed the communications technology of his era to court the public's support. We shall carefully search for evidence of his success in these efforts with monthly measures of Roosevelt's speeches and other public activities.

II. The Roosevelt Approval Series

During his first term, the Gallup Poll and *Fortune* magazine occasionally surveyed Americans on their evaluation of Roosevelt's performance, but not until October 1937 did Gallup add the approval question to its regular monthly survey. Moreover, the initial question—"Are you for or against Roosevelt?"—failed to separate evaluations of the man from his performance as president. A year later, Gallup switched to a more specific "job performance" question—"In general, do you approve or disapprove of Roosevelt as president?"—which it administered monthly until July 1940, when it dropped the approval question for 6 months in favor of a candidate-preference question for the upcoming presidential election. After the election Gallup reinstated the Roosevelt performance question, but in May 1941 it altered the wording once again, this time adopting the modern "job performance" wording, "Do you approve or disapprove of the way Roosevelt has handled his job as president?" Gallup asked this question monthly until April 1943 when it discontinued routine administration of any presidential support questions until the end of the war.⁵

So, we have a series that begins 4 years into the administration and ends 2 years before the president's death in 1945, suspends the performance questions during the 1940 presidential campaign, and changes question wording three times. While less than ideal, the changing question wording and the break in the time series do not pose as serious a problem as one might expect. If variations in question wording affect only the level of support and do not interact with the explanatory variables, we can use dummy variables to pick up any intercept shifts caused by differences in question wording. Even so, more direct evidence is available suggesting that even this adjustment should not be necessary. Twice in 1938 and 1939, the Gallup organization compared responses to the first and second question wordings by administering each to a split sample. The results (Clark 1943, pp. 57–58) were essentially identical: percentage point differences of .4 and .2. The transition between the second and third question in the spring of 1941 produced a larger 3 percentage point

5. Sometime during 1942, Gallup reportedly stopped issuing press releases announcing the president's latest popularity rating, but the question continued to be administered and apparently the results given to the president. We suspect a concern that reports of declining support for the president might strengthen Hitler's resolve and prolong the war prompted Gallup to suspend its "presidential popularity" press releases.

difference in the split sample survey. While this too is statistically insignificant, we introduced a dummy variable in the analysis below that failed to detect any systematic intercept shift accompanying the changeover in performance questions, and so we dropped the dummy variable from the analysis. In sum, after carefully inspecting potential same-survey and time-series differences that might arise from varying question wording, we can confidently combine responses to these different questions into a continuous (except for the 1940 campaign interruption), 66-month time series from October 1937 through March 1943.⁶

President Roosevelt's job performance rating across this time period, as noted, averaged 65 percent, with a standard deviation of 7 percent. His approval ratings ranged from a high of 79 percent in January 1942, following Japan's surprise attack at Pearl Harbor, to a low of 53 percent in September 1938, in the midst of a series of political missteps and the run-up to the 1938 midterm "defeat" reviewed earlier. Although certainly impressive, these ratings do not place his popularity in some rarefied realm unknown to modern presidents. Both Eisenhower and Kennedy, for example, enjoyed higher average approval ratings during their administrations. At no time in this series did Roosevelt's support broach President Bush's 89 percent approval rating during the aftermath of the Gulf War. And throughout 1998, scandal plagued, "soon-to-be-impeached" President Clinton also averaged 65 percent approval.

Despite Roosevelt's overall high support, there is also clear evidence of class polarization in these ratings. According to our calculations, based on placement of Gallup poll respondents into income quartiles, the economic classes differed more in their job approval ratings for FDR prior to the outbreak of World War II than for any other president for whom comparable data are readily available.⁷ Not surprisingly, the monthly averages shown in table 1 indicate that these class differences weakened as the war approached.

These findings comport well with both the narrative history of the era and the more systematic realignment literature reviewed above. To incorporate class differences in performance evaluations and test for heterogeneity, we

6. Despite an intensive search by the Roper Center, the December 1942 approval rating eluded us. Using the Kalman smoothing technique, we interpolated a value for this missing December 1942 observation.

7. While Gallup does not provide comparable data for Presidents Truman, Eisenhower, and Kennedy, inspecting the differences across levels of education, political party, and labor union status suggests that class divisions during the Truman, Eisenhower, and Kennedy administrations were highly unlikely to have approached those recorded during the first two Roosevelt administrations. The average differences shown, beginning with President Johnson, are based on three randomly selected Gallup surveys per year, from 1965 to 1999. The average for each income group, per year, was then calculated. Finally, we calculated the average difference from the lowest to highest economic group, per administration. Unfortunately, prior to 1965, Gallup did not report respondents' economic status in its published presidential approval poll summaries. To remain consistent with our data for the Roosevelt Administration, we collapsed respondents into four income categories. (See also Monroe 1984.)

Table 1. Class Differences in Presidential Approval Ratings: FDR to Clinton

President	Years	Class Difference in Approval between Lowest and Highest Class (%)
FDR (prewar)	1937–39	–39
FDR (transition)	1940–41	–22
FDR (wartime)	1942–43	–11
Johnson	1965–68	–05
Nixon	1969–74	+12
Ford	1975–76	+07
Carter	1977–80	–07
Reagan	1981–88	+22
Bush	1989–92	+13
Clinton	1993–99	–11

have disaggregated the Roosevelt approval series by economic class.⁸ For each survey in our data set, Gallup's interviewer scored the respondent as belonging to one of five economic classes and, for those who reported receiving some form of government assistance, into one of three government "relief" categories. We have collapsed these eight class categories into four—high (representing, on average, 14 percent of our samples), medium (34 percent), low income (43 percent), and relief recipients (10 percent). While this variable is susceptible to all of the usual pitfalls of coder bias and reliability, the recoded scale is reasonably well correlated with the respondent's actual reported income level (.74) and with car, telephone, and radio ownership, whenever these alternative financial measures are included in our surveys (see appendix tables A1 and A2).

Their advantages notwithstanding, the potential for sampling error is also endemic to partially disaggregated data, as percentages are derived from smaller subsamples. To address this problem, we have employed a Kalman smoothing process, which uses information from all available surrounding

8. Although economic class offers a particularly appropriate discriminating variable for analyzing the opinion dynamics of FDR's popular support, party identification would have allowed the results presented below to be more readily compared to research on more recent presidents. Indeed, party ID and class are clearly related to one another. Unfortunately, questions measuring party support were rarely asked outside the context of voting preferences. In our entire 1937–43 series, we have found only two instances (July and August 1940) where the standard party ID question was asked. In those surveys, party ID and class were moderately correlated at .21 and .17, respectively. Also unavailable in our data are other variables frequently employed in the contemporary presidential approval literature, such as ideology and political awareness. Once again, while these latter variables are clearly related to economic class, they are not substitutes. For instance, a review of the 1992 National Election Study indicated that a respondent's self-reported social class correlates only moderately with party ID, ideology, and political knowledge at .11, .16, and .24, respectively.

observations on a variable to separate systematic variation in public opinion from that caused by random sampling error (Beck 1990; Green, Gerber, and DeBoef 1999; Hamilton 1994; Harvey 1990). (This procedure is described more fully in the appendix.) The resulting "smoothed" approval series offers more accurate point estimates of the "true" monthly variations in FDR's public approval within each economic category.⁹ Figure 1 displays the smoothed approval series employed in the analysis below.

Simply disaggregating Roosevelt's approval trends in this way reveals a great deal about Roosevelt's popular support and suggests much more. First, the class basis of Roosevelt's prewar approval is unmistakable. Prior to 1940, when World War II began to replace the domestic economic crisis as the predominant political issue in America, an average of 73 percent of relief recipients approved of President Roosevelt's job performance. Ascending the class ladder, approval declines stepwise to an average of 57 percent for low-income respondents, 46 percent for the medium-income group, and only 34 percent among the highest economic class. As shown in figure 1, these class differences shrank sharply in 1941, presumably as the economy recovered and public attention shifted from divisive economic issues to the war looming in Europe.

Second, the variance exhibited in these trends gives us reason to suspect that the strength of the time-series relationships will vary by class. Moving up the class ladder, the standard deviations in approval increase in a stepwise fashion from .05 for relief recipients to .15 for those respondents placed in the "high" economic group. Just as the slight variation in approval among relief recipients suggests that this core Democratic constituency was locked in to supporting Roosevelt, the shifting approval rating among upper-income respondents suggests that this constituency reacted to political events and conditions in their assessments of FDR's job performance.¹⁰

Third, the advent of war dampened class polarization, and perhaps with it any heterogeneity in performance evaluations. Two processes appear to have

9. One potential problem with employing the Kalman filter process is that some genuine short-term fluctuations in approval ratings may be inadvertently smoothed away, along with the random sampling error. In fact, employing the non-Kalman smoothed series (not shown) produces uniformly stronger relationships than those reported in the text, for all four classes of respondents. These differences are fairly modest, however, and do not materially affect our results.

10. One might anticipate that high-class respondents would be the mirror opposite of relief recipients in being "locked in" to opposing Roosevelt. If true, the largest variations in approval should be apparent for the two middle groups, who, one can assume, were less wedded to a partisan stance of approval or disapproval. This conjecture, however, presumes that the distributions of presidential evaluations for high-class and relief respondents were located an equal distance from the threshold dividing approvers from disapprovers. Unfortunately, without knowing where each class group's distribution of presidential evaluations lies in relation to the approval-disapproval threshold, we cannot predict whether high-class respondents should mirror their relief counterparts in their propensity to change opinions. The empirical results reported below do suggest, however, that more high-class respondents than relief recipients are located near the threshold. For consideration of the quantal response properties of presidential evaluations, see Kernell and Hibbs (1981).

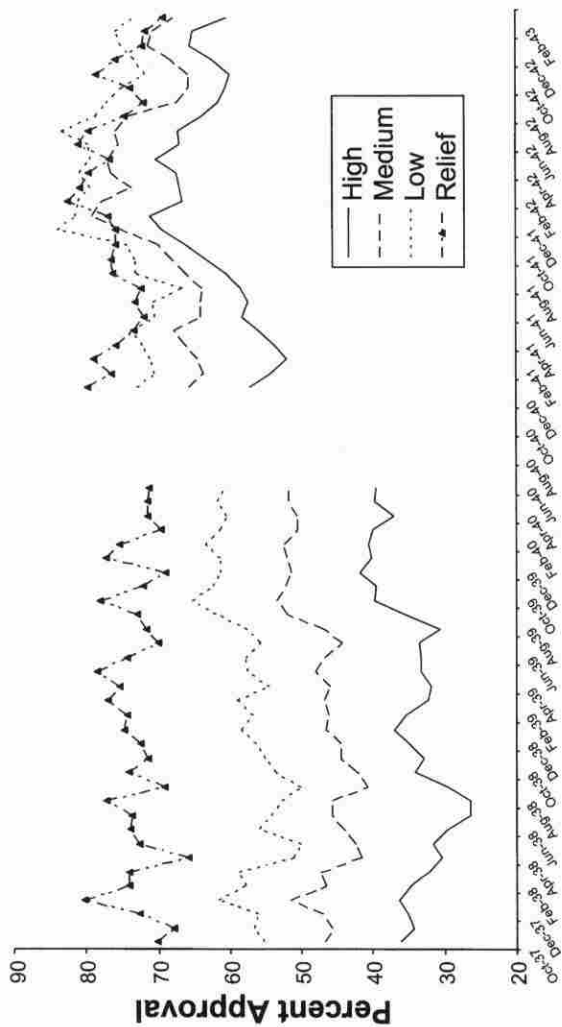


Figure 1. President Roosevelt's (smoothed) approval ratings, 1937-43. Source: AIPO Surveys, 10/37-3/43

Table 2. Pro-Isolationist Sentiment by Economic Class (%)

	Relief	Low	Medium	High
December 1940 (<i>N</i> = 1,582)	40	33	31	25
May 1941 (<i>N</i> = 3,035)	44	41	35	37

promoted this class convergence. First, figure 1 shows that most of the space separating the classes was closed by moderate- and upper-income respondents. The timing of this movement closely tracks the president's efforts to gain the support of the Republican leadership for the administration's increasingly internationalist stance. Perhaps upper-class respondents gravitated toward Roosevelt less from direct enthusiasm for his policy or rhetoric than as a result of dampening criticism from Republican leaders (Brody 1991). Second, figure 1 also shows that the president's support from his core, relief constituency actually declined for several brief periods during the war. In fact, approval levels among relief recipients dropped below such levels for low-income respondents and even, on two occasions, below the medium income group's approval level. This finding is consistent with historical conjecture (Donovan 1951) and some survey evidence (Cantrill 1940) that many of the same constituencies that gave Roosevelt unswerving allegiance in fighting the Depression were much less disposed to endorse his war-intervention policies. This is clearly displayed in the percentages in table 2, in which two of the prewar Gallup surveys (used to create our approval series) found the two lowest economic classes *opposing* U.S. participation in the war in larger numbers than did the two highest economic classes.¹¹

III. Modeling FDR's Support

The previous discussion suggests several classes of variables that must be taken into account in estimating Roosevelt's popular support. These are the Depression, World War II, and Roosevelt's efforts to win the public's backing for his economic and foreign policies. Common sense, as well as the distributions of support shown in figure 1, caution us against assuming that the same variables should necessarily influence public opinion throughout our

11. Both surveys asked, "Which of these two things do you think is more important for the United States to try to do— (1) To keep out of the war ourselves, or (2) To help England/Britain [win], even at the risk of getting into the war?" (Gallup-AIPO Surveys, 12/31/40 and 5/29/41). Interestingly, the data also suggest an overall uptick in pro-isolationist sentiment between December 1940 and May 1941. Twohey (1941, pp. 448–49) offers a potential explanation in the topic of the president's address. The first was confined to aid to Britain, while the second dealt with the defense of the entire Western hemisphere.

series as the nation shifted its attention from contending with economic hardship to fighting a "total" war.

THE ECONOMY

No time-series analysis of presidential popularity has failed to find the public holding the president responsible for the economy's performance. It is the single most pervasive finding in this field of research, despite the fact that nearly every study has elected to measure economic performance differently. Among the "hard" economic indicators, three have stood out in the literature in providing significant and easily interpretable results: unemployment, inflation, and real disposable income. The Depression, and later the war—with its accompanying mobilization and government controls—created extreme values and dramatic swings in these indicators. In 1937, massive unemployment still represented a national catastrophe, but 3 years later, the war had created a severe labor shortage. Deflation, not inflation, was the more prominent economic malady throughout the peacetime period; shortly after U.S. entry into the war, extensive price controls had to be installed to keep inflation at bay.¹²

As shown in figure 2, unemployment and inflation trend inversely prior to the war, but after a brief spike in inflation immediately following U.S. entry into the war, government rationing and price controls caused inflation to decline in parallel with unemployment. Overall, these variables are highly correlated with each other at $-.89$ and with a war dummy variable (set at 1 after 11/41) at $-.77$ and $.63$, respectively. Similarly, personal income varies with unemployment and inflation at $-.77$ and $.72$, respectively, and with the war dummy at $.52$.¹³ Given these highly collinear relationships (and after inspecting the multivariate relationships), we shall use only unemployment to represent the Depression economy, setting it to zero during the war. Our preliminary analysis supports the stipulation that after Pearl Harbor, the public substituted the war for the economy in evaluating President Roosevelt's performance.¹⁴

12. The combination of deflation during the Depression and government-imposed price controls during the war effectively rendered inflation a nonissue throughout our series.

13. Unemployment and inflation are measured as the monthly seasonally adjusted national unemployment rate and the percent change in the moving average of the monthly consumer price index (CPI), respectively. Income is measured as the percent change in the moving average of monthly aggregate personal income. We also tested monthly federal relief distributions to the aged, blind, and those qualifying for aid to families with dependent children. None of these policy measures performed as well as the macro-economic indicators.

14. Nonetheless, we tested a variety of alternative specifications (not shown), the results of which support this stipulation. Not surprisingly, given the absence of inflation throughout this period, unemployment outperformed inflation across all model specifications. Additionally, previous scholarship has consistently found that, compared to real disposable income, inflation and unemployment better capture the politically relevant dimensions of national economic performance (Kernell 1978; MacKuen, Erikson, and Stimson 1992; Nadeau et al. 1999; and many others). Indeed, real disposable income, which is highly correlated with inflation and unemployment, is largely a function of the former two variables. They also consistently outperformed income across

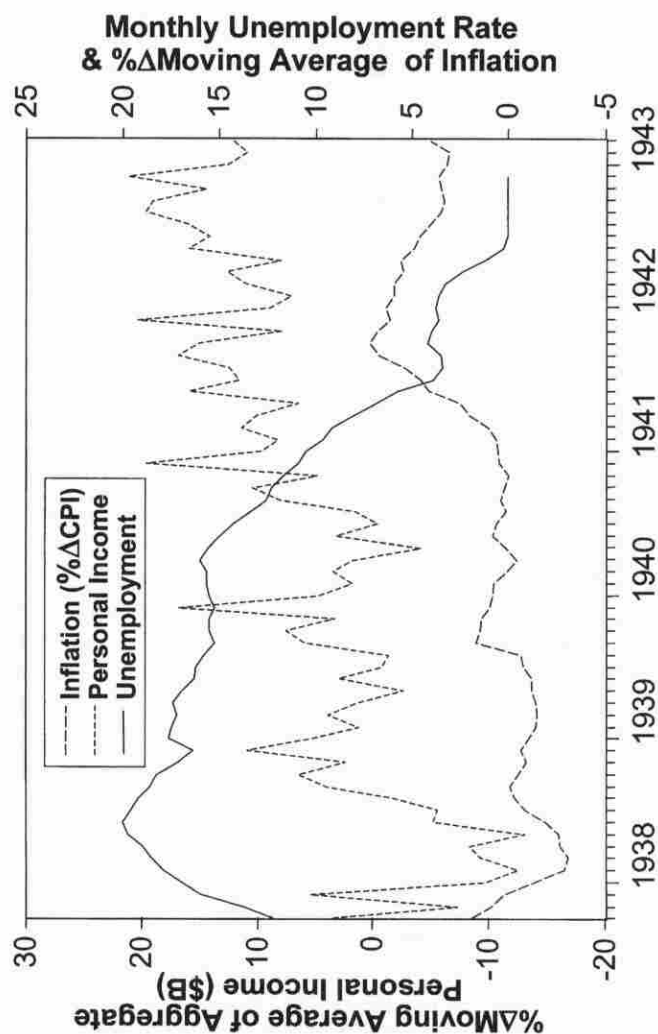


Figure 2. Economic trends, 1937–43. Source: National Bureau of Economic Research (<http://www.nber.org/databases/macroeconomiccontents/index.html>).

THE WAR EFFORT

America did not officially enter World War II until after Japan's surprise attack on Pearl Harbor on December 7, 1941, and Germany's declaration of war against the United States the next day. However, having privately decided war was inevitable, President Roosevelt began preparing the public for U.S. entry several years earlier, and it is there that the war as a political issue might have begun influencing the public's assessment of his performance. In his January 1939 State of the Union Address, the president urged reform of U.S. neutrality laws. This launched what became a continuous and gradually mounting flow of presidential rhetoric intended to convince the public that the United States could not permanently stand on the sidelines.

To capture the stepwise escalation of World War II, both before and after U.S. entry, we have developed two variables. "Nations at War" tallies the number of countries officially engaged in the war in Europe, beginning with Germany's *Anschluss* with Austria in March 1938.¹⁵ This variable is designed to tap any rally in support for the president as the war in Europe expanded and intensified. It follows Jacob's (1940, p. 55) early finding that American public opinion reflected "the importance of the cumulative effect of world events on opinion in contrast to the influence of particular events."¹⁶ Beginning with Pearl Harbor, $\Delta \ln(\text{U.S. Casualties}_{t-1})$ —the lagged monthly change in the natural logarithm of the total number of casualties suffered by the U.S. army—gauges the impact of American involvement in overseas hostilities on overall evaluations of President Roosevelt's job performance.¹⁷ We have employed a logarithmic transformation in order to compensate for the extreme volatility in the monthly variations in U.S. casualties.¹⁸ To account for the

all of our model specifications. Hence, we elected to focus on inflation and unemployment both because these indicators better address the predominant issues of the historical period we are investigating, and because they more closely link our research to contemporary scholarship.

15. This variable codes Japan as entering the war following Pearl Harbor. We have chosen to focus on the war in Europe, with this single exception, because, even while U.S. relations with Japan deteriorated in 1940 and 1941, Roosevelt offered almost no public comment on events in Asia or U.S. policies toward Asia (Steele 1984). Steele argues that Roosevelt feared any forceful comments might create demands for what he considered to be premature actions. Hence, until Pearl Harbor, the war in Asia had a much lower profile for Americans than did the fighting in Europe.

16. We tested various dummy configurations for specific events and, like Jacob, found them to perform no better than this cumulative measure.

17. We also tested our models with an additional variable measuring the monthly total level of U.S. casualties, but this variable proved highly insignificant in virtually all specifications, and so has been omitted from the reported results.

18. Even the logarithmic transformation of $\Delta \text{U.S. Casualties}$ is subject to fairly wide fluctuations. In particular, the United States suffered over 29,000 casualties in 1 month in May 1942, primarily in the Pacific (in the Philippines). While the logarithmic transformation substantially mitigates the extreme values, the May 1942 logarithmic change in casualties remains larger than the others. To determine whether this single event was driving our findings, we experimented with various model specifications, such as including a dummy variable for May and June 1942 (the 2 months affected by the spike in casualties in May) and excluding those 2 months from the model. The results were broadly similar to the full series, so we have chosen to report only the results from the full series.

likely erosion of the rally effect (Mueller 1970, 1973) caused by major battles and other high-profile events as the war dragged on, we have multiplied the casualty variable by the number of months since U.S. entry into the war. Together $\Delta \ln(\text{U.S. Casualties}_{t-1})$ and its time indexed variant $[\Delta \ln(\text{U.S. Casualties}) \times \text{Months of War}]_{t-1}$ are designed to represent the anticipated salutary effect of the early stages of the war on Roosevelt's popularity and the gradual erosion of these benefits. If this dynamic indeed describes the public's response to World War II, the detrended change in casualties should exhibit a positive coefficient, and the adjusted variant, a negative coefficient.

Figure 3 maps these World War II variables over time. Clearly, Nations at War and the logged casualty variable tap very different parts of the wartime calendar. The first mostly covers the war as it emerged as a national issue; the latter covers the direct cost of U.S. participation. Indeed, these two variables correlate only modestly at .17.

PUBLIC APPEALS

American presidents have long viewed going public as a way to replenish or expand their support in pursuit of preferred policies (Kernell 1997; Mondak 1993; Page, Shapiro, and Dempsey 1987; Simon and Ostrom 1989). Research has shown that merely by mentioning an issue, presidents can induce the public to pay closer attention to it (Cohen 1995). Some research even suggests that public appeals may enhance presidents' ability to successfully employ force abroad (James and Oneal 1991; Ostrom and Job 1986). Anticipating modern presidential practices, Roosevelt regularly went over the heads of Congress and spoke directly to the American people through frequent radio appearances, including his famous fireside chats. In fact, as figure 4 shows, once America entered the war in December 1941, Roosevelt doubled the frequency of his signature "chats" with the American people, from less than two per year between 1937 and 1941 to four per year in 1942.¹⁹

We measured presidential rhetoric in a number of ways, as displayed in figure 4. The total number of presidential radio addresses delivered each month represents a general measure of the intensity of Roosevelt's public rhetorical activities.²⁰ The figure also distinguishes Roosevelt's public statements according to whether the topic of his address chiefly concerned the economy

19. Roosevelt also delivered four fireside chats in 1943 (not shown).

20. In order to identify each instance of a presidential address or speech that was broadcast on the radio, we relied on the Public Papers of the President, which are now available on CD-ROM (American Reference Library 1998). This variable tallies the monthly total number of presidential appearances on the radio.

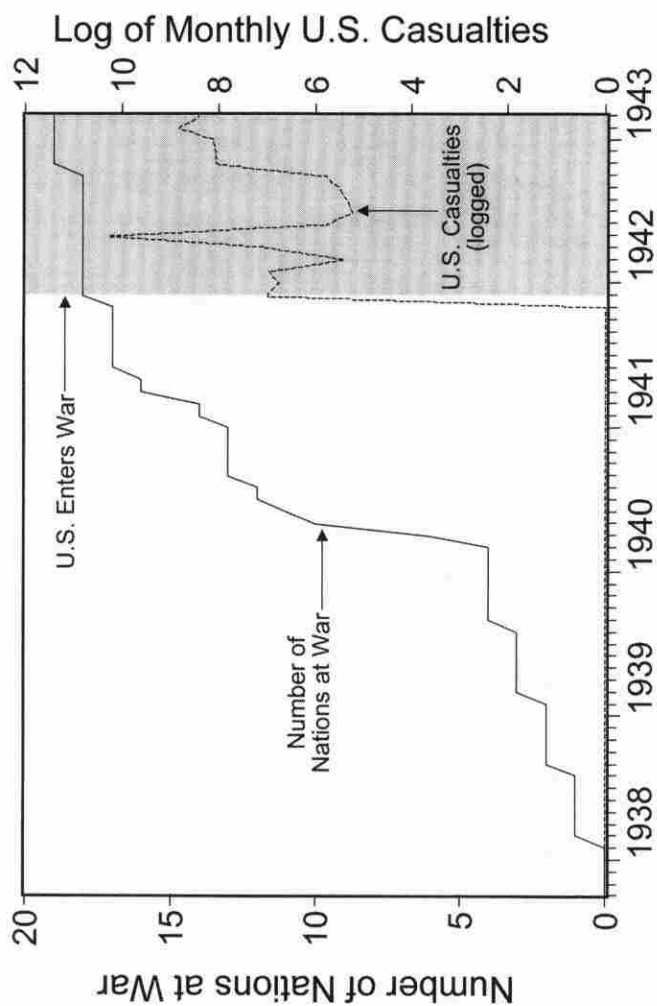


Figure 3. Number of nations at war in Europe and monthly U.S. war casualties, 1937–43. Source: Department of the Army (1953)

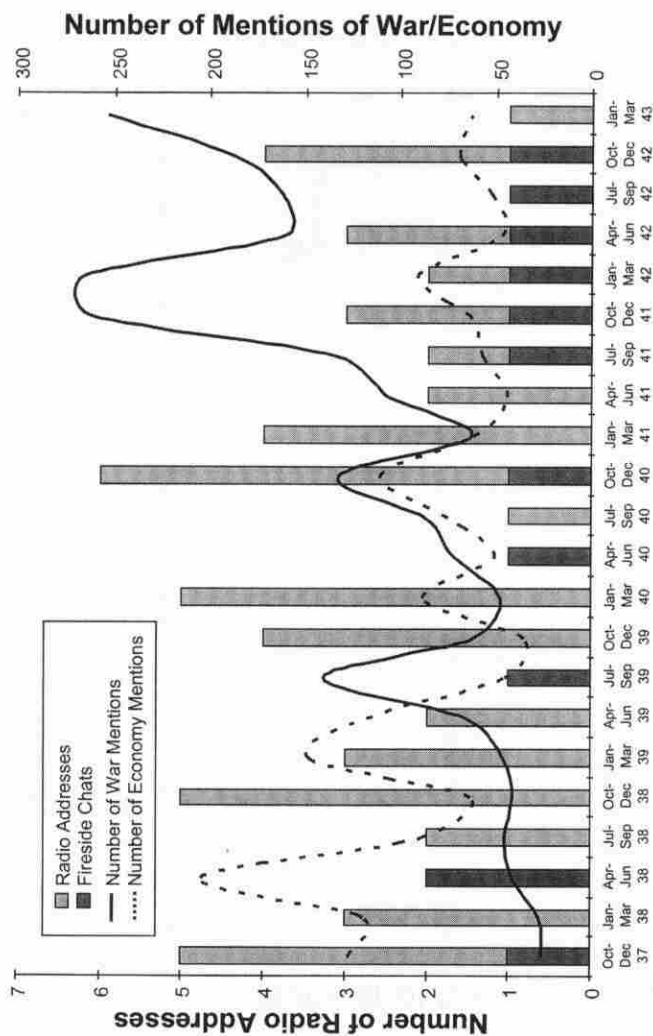


Figure 4. Roosevelt's public communication activities, 1937-43. Source: Public Papers of the President (American Reference Library 1998).

or the war.²¹ The former dominated Roosevelt's public discourse during the first several years under study, but once the war in Europe began in 1939, his public comments on war-related issues rose dramatically, especially in early 1941. These indices track Roosevelt's self-described transformation from "Dr. New Deal" to "Dr. Win-the-War."

Our earlier conjecture regarding class differences applies most decisively to presidential rhetoric.²² During the years included in our analysis, wealthy Americans were substantially more likely to own a radio, and perhaps consequently, more likely to hear the president's appeals. According to two Gallup surveys, conducted in 1937 and 1940 (see table A2), 98 percent of wealthy Americans reported owning a radio, compared to only 62 percent of those on relief in 1937 and 73 percent in 1940. Moreover, the same surveys that showed differences in radio ownership also closely tracked exposure to the presidential addresses.²³

Despite the greater volume of radio addresses during the war, preliminary analysis of the multivariate relationships clearly indicates that only the president's peacetime radio appeals were correlated with FDR's approval ratings.²⁴ Perhaps this reflects the fact that many of Roosevelt's wartime addresses had far less to do with policies or appeals for support than with Roosevelt's stated desire to sustain public morale by providing accurate information in order to dispel rumors. Whatever the reason, there is no wartime effect. Consequently, we have elected to "turn off" the radio address variable in the post-Pearl Harbor period.

Below we estimate the following equation, consisting of two peacetime and

21. To identify the extent of presidential rhetoric devoted to the economy and to the war (shown in fig. 4), we conducted keyword searches of the Public Papers of the President on a series of economy- and war-related terms. For the economy variable, keywords included unemployment, income, depression, economy, economic, job, growth, deflation, poverty, worker, work, New Deal, inflation, and recovery. For the war variable, keywords included war, Nazi, Germany, Hitler, Tojo, Mussolini, Japan, Italy, Facism, and Europe.

22. This is consistent with Ragsdale's (1987) finding that the effect of presidential speeches on approval ratings varies systematically by respondents' economic class.

23. Once ownership rates are controlled (not shown), the exposure rates do not significantly vary across economic classes, particularly in 1937. In that instance, relief recipients who owned radios were only 8 percent less likely than wealthy radio owners (54 vs. 62 percent) to have listened to the president defend his attempt to alter the balance of the Supreme Court. In 1940, in contrast, wealthy radio owners were 17 percent more likely than relief recipients who owned radios to have listened to Roosevelt's radio address on the situation in Europe (78 vs. 61 percent). Perhaps, as Cantril (1940) speculates, poorer respondents were less interested in a war-related radio address than their economically better-off counterparts because, for those at the bottom of the economic ladder, the war and the dangers of fascism were far removed from their everyday concerns.

24. We also experimented with several other presidential rhetoric variables. The first focused solely on Roosevelt's fireside chats, the most high-profile of Roosevelt's rhetorical efforts. Additionally, we separately tested the number of mentions per month of the previously noted series of war-related and economy-related keywords from the Public Papers of the President. None of these variables performed as well as the overall tally of Roosevelt's radio addresses. They are therefore excluded from the reported results.

Table 3. Independent Variables

Variable Name	Description
Peacetime Unemployment	Monthly seasonally adjusted U.S. unemployment rate, prior to U.S. entry into the war in December 1941
FDR Peacetime Radio	Number of peacetime presidential radio addresses per month
Nations at War	Number of nations involved in the war in Europe, including Japan, beginning with Germany's annexation of Austria in March 1938
$\Delta \ln(\text{U.S. Casualties})_{t-1}$	Lagged monthly change in the natural logarithm of U.S. casualties
$[\Delta \ln(\text{U.S. Casualties}) \times \text{Months of War}]_{t-1}$	Same casualty variable multiplied by the number of months since U.S. entry into the war
Approve_{t-1}	Lagged value of the dependent variable

three wartime variables and another that spans the two periods (the independent variables are defined in table 3):

$$\begin{aligned}
 \ln(\% \text{Approve}) = & \alpha + \beta_1 (\text{Peacetime Unemployment}) \\
 & + \beta_2 (\text{FDR Peacetime Radio}) + \beta_3 (\text{Nations at War}) \\
 & + \beta_4 (\Delta \ln \{ \text{U.S. Casualties} \}_{t-1}) \\
 & + \beta_5 ([\Delta \ln \{ \text{U.S. Casualties} \} \times \text{Months of War}]_{t-1}) \\
 & + \beta_6 (\text{Approve}_{t-1}).
 \end{aligned}$$

SPECIFYING THE EQUATION

The bounded character of our dependent variable makes it appropriate to transform Approve from a linear to a logit form, particularly for our lowest economic category, relief recipients, who commonly gave FDR upwards of 80 percent approval. For the others, the transformation is unlikely to have a substantial effect, and to ease interpretation, we opt to present the linear estimation in the text and the estimation based on the logit transformation of Approve in the appendix (see table A3).²⁵

25. As we anticipated, the two model specifications produced largely similar results.

Figure 1 shows a substantial jump in Roosevelt's approval ratings, across all four economic classes, between June 1940 and January 1941, the period during which Gallup suspended the presidential approval question. We tried various approaches to determine whether the 6-month break in the series during the 1940 presidential election campaign biased our statistical estimates, including interpolating missing values using several different techniques.²⁶ In none of the alternative specifications do the substantive results differ materially from those reported below. Hence, in order to preserve the face validity of our data, we have elected to treat the missing observations as "missing."

In figure 2 we see that unemployment declined substantially during the months preceding the 1940 election, including the campaign period during which Gallup suspended the presidential approval question. This raises the possibility that changes in the economy, rather than the escalation of the war in Europe, may be driving the substantial postelection increases in popular support for Roosevelt across all four economic classes, as shown in figure 1. If so, the missing data between June and November of 1940 could produce misleading results. Yet the coefficients and significance levels on unemployment, as well as those for the other independent variables, remained largely consistent across all of our alternative specifications, including the addition of interpolated values for the 6-month preelection gap in our data. This suggests that the 6-month gap does not significantly bias our estimates.

Finally, we have followed the conventional practice in presidential popularity research of representing the president's changing approval level as an autoregressive process. Aggregate opinion changes gradually as individuals consume and incorporate information from the environment at different rates and use this information to modify their current retrospective assessments of the president's performance.²⁷ One implication of this is that the coefficients reported below represent the immediate, or impact, effect on approval rather than their cumulative effect via the lag term.²⁸

26. We interpolated missing values using both Kalman smoothing and a standard forecasting procedure (based on the structural equations). We also added a dummy term to represent the break (it proved insignificant) and separately estimated the pre- and post-1940 campaign data. This last procedure proved statistically awkward since the break falls within a year of the war and therefore is closely correlated with our specification of the economic and war variables. Obtaining reliable forecasts is difficult in the presence of a lagged dependent variable. Fortunately, our statistical software (Eviews) contains a dynamic forecasting procedure that explicitly addresses the problems associated with autoregressive models. Finally, we also tried filling in the missing values using respondents' vote intention, which was available in Gallup polls during the run-up to the 1940 election. This produced somewhat stronger results for our key causal variables. Yet, the substantial difference between presidential evaluations and vote intention was reflected in erratic lag terms across subgroups. Consequently, we have opted to take a conservative approach by limiting the analysis to observations for which approval data are available.

27. We tested extensively for autocorrelation (and found none) and heteroscedasticity (for which we corrected).

28. Rao and Miller (1971, pp. 44–46) discuss the importance of distinguishing between the immediate, or "impact" effect of a causal variable and its cumulative (long-term) effect, absorbed through the lagged dependent variable.

IV. The Impact of Class, the Depression, Presidential Rhetoric, and War

Consistent with the popularity research for other presidents, improvements in the economy during peacetime ("Peacetime Unemployment") appear in table 4 to be positively and (except for the relief series) significantly related to Roosevelt's approval ratings. At first glance, the coefficients on Peacetime Unemployment appear to be fairly modest, even as noncumulative estimates. Yet when one considers that the unemployment rate during these years varied by 20 percentage points—a degree of volatility unheard of in the postwar era—the effect of unemployment on Roosevelt's popularity appears to be far more substantial. The true magnitude of this effect can be seen more easily by calculating the predicted change in approval associated with a 1 standard deviation change in unemployment. Among the "high," "medium," and "low" groups, a 1 standard deviation increase in the unemployment rate is associated with about a 3.6, 2.8, and 4.4 percentage point decline in the president's job approval among wealthy, middle-, and lower-class respondents, respectively. Not surprisingly, fluctuations in unemployment rates in these data exert their strongest effects on lower-class respondents who, unlike relief recipients, remained in the workforce during the Depression.

Direct appeals to the public on the radio also appear in these relationships to have significantly, though modestly, enhanced Roosevelt's approval ratings, again for all but the poorest respondents. Among wealthy Americans, each additional radio address in a given month is associated with a .08 percentage point increase in the president's approval rating ($p < .06$). The corresponding increases for the medium and low groups are .06 and .11 percentage points, respectively ($p < .01$). Among relief recipients, however, the president's radio appeals again fail to systematically alter their support. This latter null finding among relief respondents is not too surprising; there were very few disapproving respondents in this class available to upgrade their assessment of the president's performance.

We were surprised, however, by the modest substantive effect of Roosevelt's radio appeals on his popularity. Prior to World War II, Roosevelt delivered as many as four radio addresses in a single month. The coefficients on "FDR Peacetime Radio" suggest that, across the economic classes, even such an intensive public rhetorical effort produced at most about a .5 percentage point increase in the president's approval rating. As we shall see, however, the president's radio appeals were far more effective in convincing the public to support his policies than in raising his personal approval ratings.²⁹

Turning to the effects of the war, table 4 provides evidence that as the

29. Cohen (1995) found evidence that presidents' rhetorical efforts were primarily successful at focusing public attention on a given issue. Variations in presidents' popularity had no significant effect on this relationship. While our study differs somewhat from Cohen's, our findings appear broadly consistent with his results.

Table 4. Correlates of President Roosevelt's Approval Ratings, by Economic Class, October 1937–March 1943 (Coefficient and Standard Error)

Independent Variable	High	Medium	Low	Relief
Constant	.209 (.059)*	.230 (.060)***	.383 (.084)***	.524 (.102)***
Peacetime Unemployment	-.496 (.187)**	-.377 (.161)*	-.607 (.166)***	-.206 (.208)
FDR Peacetime Ratio	.008 (.004)	.006 (.002)**	.011 (.004)**	.006 (.006)
Nations at War	.003 (.001)**	.002 (.001)	.001 (.001)	-.001 (.002)
$\Delta \ln(\text{U.S. Casualties})_{t-1}$.005 (.001)***	.007 (.002)***	.001 (.002)	.002 (.002)
$[\Delta \ln(\text{U.S. Casualties}) \times \text{Months of War}]_{t-1}$	-.0012 (.0005)*	-.0015 (.0005)**	-.0013 (.0005)*	-.0006 (.0006)
Approve _{t-1}	.596 (.089)***	.625 (.086)***	.494 (.110)***	.328 (.112)**
Adjusted R^2	.98	.96	.93	.15
F-statistic	448.93	254.10	130.99	2.682

NOTE.—All N 's = 58. White's heteroscedasticity-consistent standard errors are employed. Lagrange multiplier tests detected no serial autocorrelation in any of the models.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

global crisis deepened, the public increasingly rallied around their president in a surge of patriotism (Mueller 1970, 1973). Evidence of the positive effect of the growing international crisis on Roosevelt's public support, at least in the early stages of U.S. involvement, can be discerned in both war-related variables. Beginning with "Nations at War," the positive coefficients for three of the four economic groups—again, with relief recipients being the exception—indicate that as the war escalated, so too did Roosevelt's approval ratings, though only modestly, and only significantly so for the high economic group ($p < .01$). Among wealthy respondents, the entry of each additional country into the war produces a modest increase in Roosevelt's popularity of about .3 percentage points.

The importance of the war's progress for Roosevelt's support is more readily apparent in the coefficients on $\ln(\Delta \text{U.S. Casualties})_{t-1}$, which are positive across all four economic groups and significant among wealthy and middle-class respondents. For these respondents, a 1 percent positive change in the log of U.S. casualties (lagged 1 month) produces a .5 and .7 percentage point increase, respectively, in Roosevelt's job approval rating. However, the negative coefficients on $[\Delta \ln(\text{U.S. Casualties}) \times \text{Months of War}]_{t-1}$, significant for all groups but relief recipients, indicate that the magnitude of this apparent war-related rally effect diminished substantially over time, by about .12 to .15 percentage points per month, as the war continued without a decisive outcome. Multiplying the two casualty variables together indicates that, while increased casualties produced an initial, and similar, boost in Roosevelt's approval ratings among upper- and middle-class respondents, this rally effect was short-lived.³⁰ Within 5 months of Pearl Harbor, American casualties are associated with net declines in Roosevelt's job approval ratings among all four economic groups.³¹ Hence, by May 1942, any rally-related political benefits Roosevelt derived from major developments in the war—at least those producing U.S. casualties—had disappeared.³²

In contrast to the high and medium groups, among low-class respondents—the group with the largest proportionate representation in the armed services—increases in casualties are associated with immediate net declines

30. The seemingly larger substantive effect of variations in U.S. casualties on high- and middle-class respondents may be due to their relatively higher levels of information about the war. It may be the case that citizens with a higher level of information regarding the war were simply more sensitive to these phenomena. Nevertheless, a Wald Coefficient Test indicated that the coefficients on the two casualty variables are not statistically distinguishable from one another at the .05 level.

31. The "break-even" points, where a 1 unit increase in casualties is associated with no predicted change in approval ratings, are 4.2 and 4.7 months after Pearl Harbor among high- and middle-class respondents, respectively.

32. This may reflect the erosion of the post-Pearl Harbor surge in popular support for U.S. entry into the war, as the public began to recognize the magnitude of the likely costs, in blood and treasure, of war. Perhaps not coincidentally, these costs were driven home to Americans in May 1942, when the United States suffered 29,000 casualties in 1 month in the course of invading the Philippines.

in Roosevelt's approval. Indeed, according to these data, the president received no rally at all following Pearl Harbor among this latter group of respondents.³³ Taken together, these results appear to support the predominant view in the literature that rally effects tend to be ephemeral and situationally dependent (Brody 1991; Meernik and Waterman 1996).³⁴ In withdrawing the job performance question, George Gallup, a Roosevelt confidant, preempted the possibility that President Roosevelt might become saddled with low popularity ratings at home while trying to force a surrender from the enemy abroad.

The substantial differences across economic classes, apparent in the results shown in table 4, also provide strong support for our conjecture concerning variation across class groups. The differences between the coefficients across the four economic groups are statistically significant for three of the five causal variables.³⁵ Consistent with our expectations, each of the independent variables, with one exception, exert their weakest effect among relief recipients and, with several exceptions, their strongest effects among high- or medium-class respondents. The two noteworthy exceptions are Peacetime Unemployment and FDR Peacetime Radio, which, consistent with our intuition, exert their strongest effect on approval (at least in their initial impact) among poorer respondents. Low-class respondents were more sensitive to changes in the economy than their wealthier counterparts. Moreover, while a substantial majority of low-class respondents supported the president, they were, as a group, less likely to do so than relief recipients, and, hence, they were less "locked in" than this latter group. They were also more likely than relief recipients to own a radio and, hence, to hear the president's speeches.

As with the other causal variables, Peacetime Unemployment and FDR Peacetime Radio become insignificant among relief recipients.³⁶ Unemployment's surprisingly weak impact on the performance evaluations of this constituency may reflect the fact that those respondents on relief had left the labor force and so their income was insulated from changes in the economy. Similarly, the weak impact of presidential rhetoric among relief recipients may be attributable to a combination of preexisting strong approval ratings and

33. Though, according to the previously noted Wald Coefficient Test, this difference from the other groups of respondents approaches, but does not quite achieve, standard levels of statistical significance.

34. Our series ends in May 1943. This prevents us from drawing firm conclusions regarding the possibility of public rallies in response to high-profile military events later in the war. Moreover, our data cannot address the possibility that Roosevelt may have received subsequent rallies for war-related events, like peace conferences, not involving large numbers of U.S. casualties.

35. A series of Wald Coefficient Tests indicated that, except for the two casualty variables, we may reject the null hypothesis that the coefficients on the independent variables are statistically indistinguishable across all four groups at the .05 level or better.

36. An additional Wald Coefficient Test indicated that the coefficient on Peacetime Unemployment among the low-class group is statistically distinguishable from the corresponding coefficients for all other groups.

relatively lower radio ownership rates among these latter respondents.³⁷ Overall, while the adjusted R^2 for the high, medium, and low groups are an impressive .98, .96, and .93, respectively, for the relief group, the explained variance drops to .15. (Unsurprisingly, the logit-based equation performs better for these Roosevelt enthusiasts; the explained variance rises to .24.)³⁸

These findings consistently portray relief recipients as less likely to increase their support for the president as the economy improved and the war escalated. These seemingly paradoxical results make sense when one considers that relief recipients were the group most predisposed to support the president, and so fewer of these respondents were available to upgrade their support as the economy strengthened and as Pearl Harbor suddenly thrust the nation into war. Roosevelt's base level of popularity was so high among relief recipients that he simply had little room to gain additional support through public appeals or from a patriotic rally effect in response to exogenous events.³⁹

V. Discussion and Conclusion

Considering the severity of the problems facing the nation and the controversy that attended both his economic and foreign policy initiatives, it is remarkable that President Roosevelt maintained such strong approval ratings for so long. Key to his success was the surge of approval among upper- and middle-income respondents shortly after the 1940 election and well before Pearl Harbor. Perhaps, in part, FDR could thank Hitler, because polls found the public increasingly recognizing the need to support Britain even at the risk of war. But luck is only part of the story. He could also credit his own political acumen for winning over Republican leaders to his interventionist foreign policy.

While our evidence suggests that the public rewarded Franklin Roosevelt's

37. Interestingly, when we pass the coefficients from table 1 through the lagged term (not shown) to identify the longer-term effects of the causal variables, the magnitudes of the coefficients for all of the causal variables, including Peacetime Unemployment and FDR Peacetime Radio, increase in a nearly linear stepwise fashion as respondents move up the economic ladder. Perhaps, over the longer term, the lower classes tended to return to their "locked in" status as FDR's core supporters, even after short-term "shocks" resulting from such factors as increases in unemployment.

38. Somewhat surprisingly, the coefficients for the lagged dependent variables are largest for upper- and middle-class respondents. Given the consistently higher approval rates among low-income and relief respondents, we anticipated greater persistence among these latter groups, reflected by larger coefficients on the lagged dependent variables. A Wald Coefficient Test, however, revealed that the difference between the largest and smallest coefficients (middle class and relief recipients, respectively) was not statistically significant at the .05 level.

39. Once the war's casualties started taking a toll on Roosevelt's support, however, relief respondents joined the other economic classes in downgrading their appraisals of Roosevelt, albeit to a lesser extent. Among relief recipients, this decline does not achieve standard levels of statistical significance. The previously reported Wald Coefficient Test, however, indicated that the negatively signed coefficients on the time-indexed casualty variable were statistically indistinguishable from one another across all four economic classes.

Table 5. Percent Supporting Policies Advocated in Radio Addresses

FDR Evaluation:	Increased Government Spending (March 1938)		American Involvement in World War II (May 1941)	
	Approve	Disapprove	Approve	Disapprove
Heard radio address:				
Yes	78	14	77	31
No	66	16	63	32
	(N = 1,374)		(N = 3,035)	

successful dealings in Washington with enhanced support, there is little indication that his direct appeals had much effect on his standing with the public. However measured, FDR's public activities are only sporadically related to his approval rating. This does not mean, however, that President Roosevelt's public appeals failed him. Sensing the political significance of Roosevelt's national radio addresses, Gallup occasionally sent interviewers into the field immediately following these broadcasts to gauge their effect on public opinion. One of these surveys occurred in April 1938 after FDR's radio address urging increased government spending to help American businesses recover from the Depression. Gallup undertook another postspeech survey in May 1941 to measure the public's response to the president's declaration that the war in Europe constituted "an unlimited national emergency."⁴⁰ Both surveys also queried respondents' evaluation of the president, allowing us to examine the association between FDR's popular support and his ability to steer public opinion on matters of war and peace.

In table 5, respondents who approved of Roosevelt's job performance displayed a much stronger propensity than did his detractors to support the president's economic and foreign policy proposals, even among those who failed to hear the speech.⁴¹ The fact that neither policy question directly mentioned FDR suggests that these close relationships are not artifacts of responses

40. The question wording for the May 1941 survey is presented in note 11. Question wording for the April 1938 survey is as follows: (a) "Did you hear President Roosevelt's recent fireside chat on government spending?" (b) "Do you think government spending should be increased to help get business out of its present slump?"

41. Actually hearing the addresses yielded somewhat smaller, but nonetheless sizable and statistically significant ($p < .05$), gains among the president's admirers, but not among his detractors. We can, of course, only suggest the direction of causality in these relationships. Perhaps respondents who were predisposed to support the president's proposals were disproportionately inclined to listen to his radio addresses (Sigelman and Rosenblatt 1996). Others might have liked what they heard and upgraded their evaluations of his performance. Nevertheless, these relationships do show the necessary and critical linkage between Roosevelt's opinion leadership and his overall popular support.

triggered by reference to the president. Instead, via either news reports or direct communication over newsreels or radio, these respondents appear to have been independently aware of the president's stance on these national issues. Roosevelt's tireless efforts to cultivate public support paid off handsomely in these figures, if not in bolstering his personal popularity with the public, by mobilizing his supporters behind his policies.

The implications of these findings extend beyond our historical appreciation of the Roosevelt presidency. In fact, they offer two insights for our understanding of the support for *all* presidents. First, once again, the economy and war matter. Accumulated research has taught us this lesson well, but solely for "normal" times—that is, under far more bounded perturbations of the environment. The public's evaluations of Roosevelt over time tell us that they appear *always* to matter, although, in extreme circumstances, one factor may overwhelm all others, as the war appears in our estimates to have overwhelmed economic considerations.

Second, presidents strategically assemble coalitions of popular support in ways and sometimes with levels of success that should influence the way we study them. Our analysis of disaggregated trends clearly shows the constituency responses to Roosevelt's two distinctly different governing strategies: initially as a New Deal partisan and, after 1940, as a nonpartisan "soldier of freedom." Early in the development of presidential popularity research, Mueller (1973) characterized presidents' popular support as comprised of a "coalition of minorities." A president gains or (more typically) loses support when his decisions cause particular constituencies to reassess his performance.

This coalitional representation of support points toward a more heterogeneous public opinion than is generally recognized in research on presidential popularity. Constituencies respond differently to presidents' rhetoric and performance according to their interests and attentiveness (Krause 1997). Respondents on relief did not respond to changes in unemployment rates in their evaluations of Roosevelt, but those occupying the next rung up the class ladder, who were still in the labor force, did. After the war was underway, respondents on relief began to downgrade the president's performance, just as upper-income groups were rallying to support the president.

Might the heterogeneity that appears so clearly in the class-polarized, early support of FDR reappear, less stark and along some other dimension, for other presidents' approval ratings? After all, what we have described is simply the comings and goings of constituents according to their particular vantage of the president's performance. Until we become a truly mass society—and there is no evidence we are headed in that direction—we must recognize that approval ratings are the sum of opinions among discrete constituencies who will at times respond differently to the political environment.

Appendix

Kalman Filtering and Smoothing

Uncertainty arises from two fronts in time-series survey data: uncertainty regarding the "true" movement of public opinion and from random sampling error. Kalman smoothing is a method of minimizing the random component, by employing information from all subsequent and prior observations regarding sample sizes and the amount of time between polls in order to assign weights to a full sequence of observations. The smaller the sample or the larger the sampling error, the less an observation is weighted in computing the Kalman smoothed estimates.

The Kalman process involves two steps: filtering and smoothing. The filtering process employs the sample size, the current degree of uncertainty about the "true" variation in public opinion, and the estimated random sampling error in period $t - 1$, in order to weight the prediction for period t . The resulting prediction for period t represents a weighted estimate, based on current and past information. This process of "updating" the uncertainty is then repeated, moving forward in time for each period in the series. Upon reaching the final period, the filtering process is complete, and the smoothing process begins. Smoothing entails working backward in time, using the filtered estimates, one period at a time, until all periods are updated. The filtered estimates, plus the systematic (i.e., true movement in public opinion) and random (i.e., sampling error) components of the total degree of uncertainty, from period t , are employed to update the estimated systematic and random uncertainty for period $t - 1$. The new "smoothed" estimate for period $t - 1$ is then employed to reestimate the systematic uncertainty and sampling error for period $t - 2$. These reestimated uncertainty estimates are then employed to produce the final weight factor attached to the prior observation in the series. This process is repeated for all time periods. (See Green et al. [1999] for a detailed description of the Kalman filtering and smoothing process.)

For this procedure we employed software developed by Donald Green and Alan Gerber, available on their web site (<http://statlab.stat.yale.edu/~gogreen/samplemiser3.html>), for which we are highly appreciative.

Table A1. Correlations with Economic Class

Year	Own a Car	Own a Phone	Own a Radio	Income
1937	.52	.63	.32	N.A.
1938	.33	.42	N.A.	N.A.
1940	.48	.53	.24	N.A.
1941	.46	.53	N.A.	.74
Average	.45	.53	.28	.74

SOURCE.—AIPO Surveys, various years.

Table A2. Percent Ownership, by Economic Class and Year of Survey

Class	Car	Phone	Radio
1937:			
High	.93	.93	.98
Medium	.74	.76	.94
Low	.38	.25	.81
Relief	.14	.08	.62
1938:			
High	.78	.82	N.A.
Medium	.69	.73	N.A.
Low	.48	.37	N.A.
Relief	.23	.17	N.A.
1940:			
High	.92	.90	.98
Medium	.81	.68	.96
Low	.45	.26	.86
Relief	.19	.10	.73
1941:			
High	.93	.90	N.A.
Medium	.76	.69	N.A.
Low	.42	.26	N.A.
Relief	.20	.10	N.A.

SOURCE.—AIPO Surveys, various years.

Table A3. Correlates of President Roosevelt's Approval Ratings, by Economic Class, October 1937–March 1943
(Logit Transformation of Approval Ratings)

	Coefficient (SE)			
	High	Medium	Low	Relief
Constant	.252 (.057)*	.245 (.056)***	.343 (.073)***	.462 (.079)***
Peacetime Unemployment	-.115 (.043)**	-.085 (.036)*	-.134 (.036)***	-.044 (.046)
FDR Peacetime Radio	.002 (.001)	.002 (.001)**	.003 (.001)**	.001 (.001)
Nations at War	.001 (.0003)**	.0005 (.0003)	.0002 (.0003)	-.0002 (.0004)
$\Delta \ln(\text{U.S. Casualties})_{t-1}$.001 (.0003)***	.0015 (.0004)***	.0002 (.0003)	.0005 (.0004)
$[\Delta \ln(\text{U.S. Casualties}) \times \text{Months of War}]_{t-1}$	-.0003 (.0001)*	-.0003 (.0001)**	-.0003 (.0001)*	-.0001 (.0001)
Approve _{t-1}	.596 (.088)***	.622 (.085)***	.496 (.108)***	.326 (.112)**
Adjusted R^2	.98	.97	.94	.24
F-Statistic	451.74	253.77	130.52	2.655

NOTE.—All N 's = 58. White's heteroscedasticity-consistent standard errors are employed. Lagrange multiplier tests detected no serial autocorrelation in any of the models.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

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