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Guns 'N jobs: The FDR legacy

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ABSTRACT

The intrusion of war is likely to alter the standard economic voting calculus. A wartime economy is not expected to deliver the same political benefits or costs, in terms of presidential approval or votes in an election, as does a peacetime economy. The Roosevelt presidency presents a perfect target to examine economic voting in wartime. Using monthly polling data on presidential approval from late 1937 to 1945, we demonstrate that the American public suspended standard economic-voting logic during World War II. One explanation for this suspension is the enormous size of U.S. military spending. Using data on government spending from 1929 to 1950, we show that military spending had a huge effect on unemployment while the effect of non-military spending proves negligible and non-significant. It was military spending triggered by war, not the New Deal, that vanquished the Great Depression.

The Roosevelt presidency presents a perfect target for an economic-voting study. Here is a period that witnessed the most extreme swing of economic performance in American history, ranging from the Great Depression to unprecedented prosperity. The economic collapse not only ousted Republicans from the White House in a landslide but kept Democrats in control of the federal government for nearly twenty years, triggering a lasting shift of party loyalties in the American electorate. Franklin Roosevelt (FDR) also entered the history books with a policy program (the New Deal) designed to radically alter the way government shapes economic outcomes and social conditions. It is indisputable that the U.S. economy improved and returned to prosperity under the FDR Administration. But, given the stubborn persistence of unemployment along with a relapse into recession, it is a matter of debate as to how much the New Deal contributed to the recovery from the Depression. And left unexplored is the question of how much FDR's popular support owes to economic recovery.

The president steered the United States not only through its worst economic crisis, but also through the gravest threat to its national security. Entry into war is bound to affect the political support for a president and his electoral prospects, though not always with favorable consequences. The intrusion of war may also alter the standard economic-voting calculus (For overviews, see Norpoth, 1996; Lewis-Beck and Stegmaier, 2000; Duch, 2007). A wartime economy is not going to deliver the same political benefits or costs, in terms of presidential approval or votes in an election, as does a peacetime economy. In the most extreme case, wartime may lead to a suspension of the economic-voting calculus, akin to decisions by some countries not to hold elections in wartime at all.

Using a surprisingly rich trove of polling data on presidential approval from late 1937 to 1945, we demonstrate that the American public suspended the economic-voting logic during World War II.[1] Such a powerful effect of war on economic voting has rarely, if ever, been demonstrated before. It begs the question of whether World War II

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[1] The polling data were obtained from *The Roper Center for Public Opinion Research*.

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constitutes a special case and if so, what makes it so? American entry into World War II, among other things, sparked a surge in military spending on a scale never seen before. Using data on government spending, we demonstrate that military spending had a huge effect on unemployment while the effect of non-military spending proves negligible and non-significant. It was military spending, not the New Deal, that vanquished the Great Depression. Was this just a unique case? Or does the failure of domestic spending to bring down unemployment spell out a discouraging lesson for policy making?

1. Economic voting in wartime

Running for re-election during the Civil War, Abraham Lincoln admonished voters in 1864 that "it is not best to swap horses while crossing the river." In wartime, people are supposed to set aside their divisions over issues like the economy and unite behind their elected leaders. The "rally 'round the flag" is a major concept in the study of political behavior (Mueller, 1973). A wealth of studies has probed the surge in leader approval in the wake of rally events (e.g., Oneal and Bryan, 1995; Edwards and Swenson, 1997; Nickelsburg and Norpoth, 2000; Lai and Reiter, 2005; Wood, 2009). Yet no matter how big the initial surge may be, its staying power is not expected to be strong enough to vanquish concerns over other matters like the economy for long, or to secure victory in the next election. One rally that was powerful long enough to diminish the impact of the economy on presidential approval as well the next presidential election was the one sparked by the 9/11 attacks (Norpoth and Sidman, 2007; Lewis-Beck et al., 2008). Another occurred in British politics as a result of the Falklands War of 1982. The rally 'round Prime Minister Thatcher was strong enough to trump a bad economy and assure a Conservative victory in the general election of 1983 (Clarke et al., 1990; Norpoth, 1992). We would expect the same effect for U.S. entry into World War II, sparked, as it was, by the Japanese attack on Pearl Harbor.

While the rally effect may persuade voters to ignore a bad economy or other bad domestic news, the human toll exacted by war may lead them to ignore good news about the economy. During the wars in Korea and Vietnam, with battle casualties mounting, support for each of those wars fell, and so did the approval rating of the respective commanders in chief (Mueller, 1973; Kernell, 1978; Ostrom and Simon, 1985). Economic conditions were quite favorable but war opposition turned voters against the White House party in both the 1952 and 1968 presidential elections (Campbell et al., 1960; Converse et al., 1969). Even in World War II American casualties may have taken a toll on presidential approval (Baum and Kernell, 2001; Kriner, 2006). The Iraq War drove down approval for British Prime Minister Blair with mounting casualties, though not to the point of trumping a good economy, as seen by voters, in the 2005 election (Clarke et al., 2009).

Beyond rallies and casualties, war is likely to shape public opinion through the justifications for entry (Jentleson, 1992; Eichenberg, 2005; Clarke et al., 2009). This would seem an easy call when military action is taken in response to an undeniable attack on one's own country, as happened in Pearl Harbor 1941, and is endorsed by a declaration of war with barely a single dissenting vote. Even before the attack, the outbreak of war in Europe generated a groundswell of support in the American public for aiding Britain and war preparations that assured FDR's reelection in 1940 (Norpoth, 2012). Once the fighting has started, the prospect of success becomes an important ingredient of war sentiment. Expectation of victory has proved to be a powerful determinant of public support for military operations (Larson, 1996; Eichenberg, 2005; Gelpi et al., 2009). In World War II polls soon showed that few Americans had any doubts about a U.S. victory (Cantril, 1967, 48). Given the prospect of certain victory coupled with an unquestioned belief in the cause, public support for World War II was overwhelming. Under those circumstances, was there any room for the economy to matter for presidential approval? What data are available to shed light on this question?

2. Measures of approval and economy

Surveys began asking Americans about their opinions of President Roosevelt in August of 1937. From that point on until his death, a total of 180 polls (mostly conducted by Gallup) probed FDR's approval ratings, yielding a monthly time series with some gaps.[2] Unlike presidential approval, economic issues failed to get the polls' attention during the Roosevelt years; there is no way to construct a time series of economic views to match up with the FDR approval series. The only way for the economy to enter an economic-voting study during that era is through indicators of economic performance. Even such data are not as easy to come by for the 1930s as might be expected. Only a few are available in monthly reports for that time.[3] Mass unemployment was the public face of the Great Depression and the shrinking of the bread lines an easy marker of recovery. If any economic indicator was likely to matter for political approval and electoral choices at that time, it would be the extent of unemployment.

The relationship between unemployment and FDR approval is depicted in Fig. 1 separately for peacetime and wartime. The peacetime pattern is the familiar one from many studies of economic voting: the higher the level of unemployment, the lower the level of presidential approval. FDR fits the mold (Baum and Kernell, 2001). When he defeated Republican President Herbert Hoover in 1932, at least one of four Americans was out of work. Four years later, FDR won re-election in a landslide, with about one in seven Americans still out of work. From that point on during the peacetime years, FDR's approval moves in tandem with the monthly unemployment rate. But not so in

[2] For the most part, the Gallup Poll used the familiar wording, "Do you approve or disapprove of the way Roosevelt is handling his job as President today?" Respondents for the polls were chosen by "modified probability" sampling, as Gallup called it, but more commonly referred to as quota sampling (Berinsky, 2006).

[3] One is the unemployment rate, as compiled by the National Bureau of Economic Research (NBER), beginning in 1929 and extending through 1946 (http://www.nber.org/databases/macrohistory/contents/series#08292).

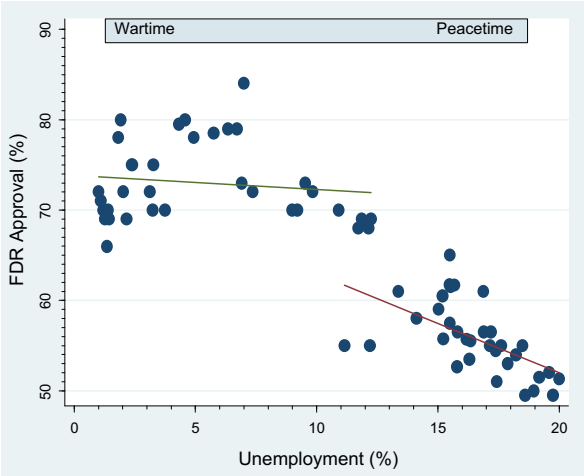

Fig. 1. The relationship between unemployment and FDR approval.

wartime! Now his approval hardly budges, no matter whether unemployment is as high as 12 percent or practically zero. The economic-voting calculus, it appears, has been suspended in wartime. It is also worth noting that wartime has pushed up FDR's approval to a level unheard of for presidents in peacetime. This is another sign of the impact of World War II on presidential approval.

The wartime period in Fig. 1, it should be pointed out, begins before the Pearl Harbor attack. Throughout much of 1941, the United States was waging an undeclared war in the Atlantic against Germany (Langer and Gleason, 1953). The presidential contest in 1940, for all practical purposes, was fought under wartime conditions. War in Europe, not a slumping economy, was the dominant topic of the election campaign. Polls at that time devoted a great deal of attention to opinions on foreign policy issues and hardly any to economic ones (Cantril, 1967). It is most unlikely FDR would have won the 1940 election without war in Europe (Burke, 1971; Norpoth, 2012). Hence, for purposes of this analysis, the wartime period begins in November of 1940.

3. A test of the FDR approval function

Graphs make strong impressions, but they are no substitute for statistical tests. This is especially true for data of the time-series variety, where time may play tricks with the observer. The time series at hand confronted us with an additional obstacle that might seem hard to overcome. While the unemployment series covers every month from 1937 to 1945, the FDR approval series has gaps, with approval missing for about one of every four months. Just as physics abhors a vacuum, time series analysis does gaps. Considering possible ways of overcoming this obstacle, we rejected interpolation (not helpful for wide gaps) and imputation (not enough available predictors of approval). Instead we decided to turn to Kalman filtering (Beck, 1989; Green et al., 1999; Little and Rubin, 2002; Sidman and Norpoth, 2012). Kalman filtering is tailored to the task of dealing with time series relationships where observations are missing for the dependent variable. It allows us to use ARIMA-models to estimate the autoregressive properties of time series along with the effects of the structural variables of interest (unemployment in our case). How does Kalman filtering achieve this feat with gaps in the time series? It does so by using all the available observations to make the best prediction of the missing ones. Note that this does not artificially inflate the statistical significance of any estimates because of the added observations.

Table 1
FDR approval as a function of unemployment in peacetime and wartime.

Variables	Peacetime	Wartime
Unemployment rate	−0.73* (0.36)	−0.03 (0.42)
AR(1)	0.40 (0.24)	0.60** (0.20)
Intercept	67.76** (4.85)	72.31** (2.64)
Root mean squared error	3.04	3.43
Adjusted R^2	0.42	0.41
Number of observations	33	35
Ljung–Box Q (Lags)	1.14 (6)	3.56 (6)

*$p < 0.05$ **$p < 0.01$.
Note: ARIMA (1,0,0) estimates, with standard errors in parentheses. Peacetime covers observations from 1937/8 to 1940/10, wartime form 1940/11 to 1945/2.

The results in Table 1 confirm the effect of unemployment on FDR approval in peacetime. The higher the unemployment rate, the lower FDR's approval, and vice versa. A 1-point increase of the unemployment would lead to about a 1-point drop in approval. Given the range of unemployment from eight to 20 percent during the peacetime period covered here, this would translate into a maximum shift of about 12 points in FDR approval. The statistical control for first-order autoregression – the AR(1) term – has not deflated the impression made by Fig. 1. In wartime, however, no effect on FDR approval materializes for unemployment. Statistical controls have not been able to resurrect a patient who looked dead in Fig. 1. Once the United States went on a war footing, unemployment ceased to move presidential approval one way or the other, while also blurring class divisions (Baum and Kernell, 2001). It would be a fallacy to attribute the high level of FDR's approval during the wartime period – averaging about 72 percent – to the disappearance of unemployment. Voters had suspended their economic-voting calculus.

4. Federal spending and unemployment

Many economists claim that the New Deal has falsely been praised as the panacea for unemployment reduction and economic recovery from the Great Depression (Vedder and Gallaway, 1993; Powell, 2003; Cole and Ohanian, 2004). Instead, the argument goes, the real end of the depression came through the decision of the U.S. to enter World War II (Leuchtenburg, 1963; Hall and Ferguson, 1998). While the U.S. economy grew strongly during FDR's first term with the introduction of the New Deal that growth, as shown in Fig. 2, was not enough to restore pre-Depression prosperity.[4] Even worse, some of the recovery was undone by the 1938 recession. It was only during the

[4] The data for gross domestic product and its various components such as defense spending were obtained from the Bureau of Economic Analysis (http://www.bea.gov/), Interactive Table 1.1.5.

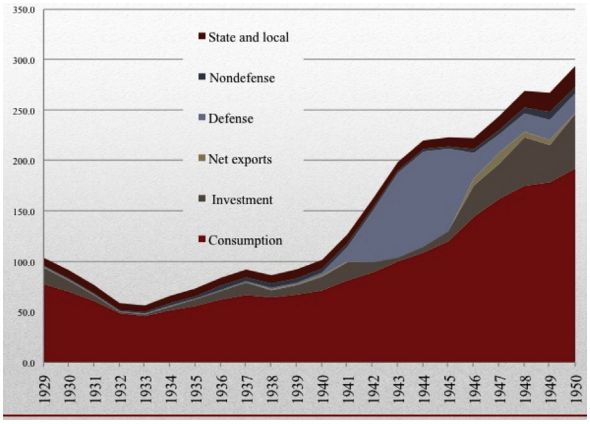

Fig. 2. The components of the gross domestic product, 1929 to 1950.

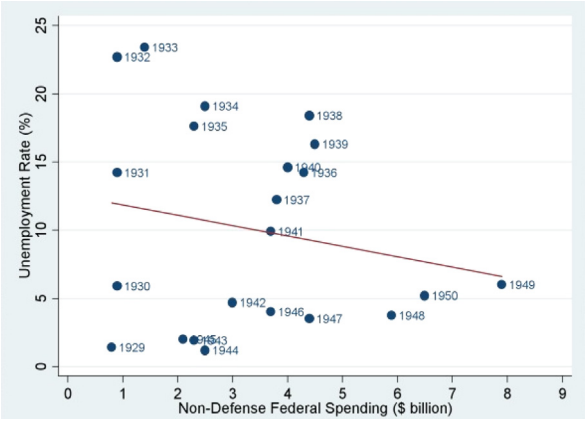

Fig. 4. The relationship between non-defense federal spending and unemployment.

war years (1941–1945), long after both the First New Deal (1933–1934) and the Second New Deal (1935–1938) had been in effect, that the economy recorded growth rates big enough to spell the end of the Great Depression. This pattern holds for unemployment as well. In FDR's first term the rate fell to only 15 per cent, still far above the pre-Depression level. FDR's second term witnessed an uptick of unemployment during the 1938 recession that receded to about the same level in 1940 where it had been in 1936. It took the wartime economy to bring the unemployment rate down to a level not seen since the end of 1929. The major impetus for economic growth, Fig. 2 suggests, was the massive increase in defense spending (Hall and Ferguson, 1998). By 1943, the defense component accounted for almost half the total U.S. economic output. So how much did defense spending affect unemployment, as compared to non-defense spending during this period centered on the Roosevelt years? The relationship between defense spending (logged since the wartime peak exceeds the pre-war level by a 50-1 ratio) and unemployment is quite strong, as can be seen in Fig. 3; note that all defense spending is part of federal spending. In contrast, the correlation between non-defense federal spending and the unemployment rate is very weak, as shown by Fig. 4. A generous estimate would be that the increase in such spending between 1932 and 1936, from roughly one billion to four billion dollars, lowered the unemployment rate by two percentage points at best. At the same time, the increase in defense spending between 1939 and 1942 may have reduced the unemployment rate by more than ten percentage points (Fig. 3). Table 2 summarizes the results of a multivariate time-series analysis of annual unemployment from 1929 to 1950. The list of predictors consists of defense spending, and non-defense federal spending, along with state and local spending, and private investment. Given the non-stationarity of these time series, each of them has been treated in differenced form, and so has the unemployment rate. In other words, the question to be answered is, does an increase (or decrease) in a form of government spending or private investment lead to a decline (or rise) in unemployment? Recall that defense spending has been logged (as has private investment because of vast disparities over time). Technically, the Roosevelt years only comprise the 1933–1945 time frame, but to get leverage on FDR's contribution to economic recovery we needed to include the Depression years. We also added the immediate post-war years (1946–1950) to account for the reversion to a peacetime economy with its sharp cutback in defense spending.

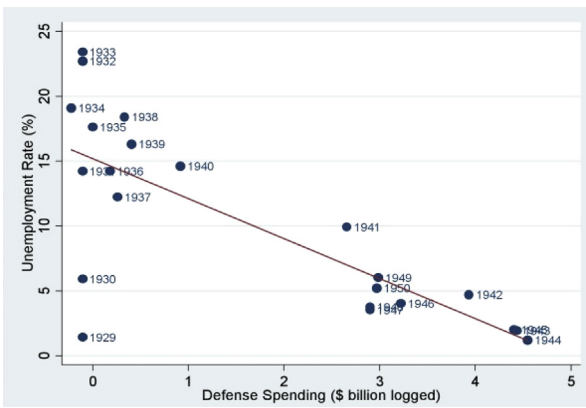

Fig. 3. The relationship between defense spending and unemployment.

Table 2
Effect of government spending on unemployment, 1929–1950.

Variables	Coefficient	Standard error
Defense spending	−4.58***	1.27
Non-defense spending	0.07	0.54
State and local spending	−0.26	0.39
Private investment	−4.79***	0.81
Intercept	1.27**	0.56
Root mean squared error	2.11	
Adjusted R^2	0.63	
Number of observations	21	
Q (Lags)	2.44 (5)	

*$p < 0.05$ **$p < 0.01$ ***$p < 0.001$.
Note: ARIMA (0,1,0) estimates; all variables have been differenced; defense spending and investment have been logged prior to differencing.

The results in Table 2 confirm the powerful effect of defense spending on job creation. An increase by one (logged) unit of defense spending would reduce the unemployment rate by about 4.6 points. Controlling for other government spending components and private investment, the massive increase in federal defense spending between 1939 and 1941 (by two logged units) may have lowered unemployment by 9 points. In contrast, non-defense federal spending does not register any impact on the unemployment rate. As far as government spending is concerned, New Deal programs failed to alleviate unemployment. The same goes for state and local spending; at worst, such spending may have been counterproductive. Private investment did exert an influence on job creation on par with defense spending. The finding implies that private investment has the potential to substitute for defense spending as a job creator.

While the lack of evidence for non-defense spending as a job creator undermines claims for the New Deal it also challenges the widely reported claim that the 1938 recession should be blamed on cutbacks in such spending. What is more, non-defense federal spending actually grew in 1938, after a slight drop the year before, but the amounts are so small as to be of little consequence anyhow. Given the results reported here, the far more likely culprit for the 1938 recession is private investment, which recorded a sharp that year.

With defense spending proving to be such a powerful job creator, one may wonder how the American economy avoided a return to the Great Depression with its mass unemployment once World War II ended. As widely feared, the end of the war did spark a sharp contraction of the U.S. economy. The decline in real GDP recorded for 1946 (11 per cent) was close to the worst annual drop during the Depression (Vedder and Gallaway, 1993). Yet this contraction did not bring back the bread lines, nor did it persist. Aside from the important role of private investment, a major reason was that defense spending, though being cutback, never returned to the low pre-war level. The start of the Cold War meant a continuation of substantial military spending and of the draft as well. Postwar defense spending holds fairly close to the share of the overall economy such spending reached in 1941.

Though technically not at war then, the United States felt the impact of the war going on in Europe. First, there was an increasing demand for U.S. aid by Britain and her allies, including war material that was paid with gold; second, to prepare for a possible involvement in the war, the U.S. initiated a huge defense buildup (Hall and Ferguson, 1998, 155). Just to cite some figures, the United States raised its defense spending from $2.5 billion in 1940 to $14.3 billion in 1941, something never before seen in "peacetime." GDP surged by 17 percent in 1941 and unemployment fell below 10-percent for the first time since 1931, dropping to 6.9 percent in December 1941. By then, the economy was close to full employment again (Hall and Ferguson, 1998, 156). So even before the U.S. officially entered the war, the American economy was already in high gear. It would not require the massive military spending following active U.S. participation in the war to reach full employment. The 1941-level of such spending would suffice, and any cutbacks of defense spending to such a level would not jeopardize full employment.

Our findings raise the question of whether military spending is inherently a better job creator than domestic spending, or whether it simply depends on the amounts spent. Short of putting millions of Americans in uniform or in factories producing weapons for them to use, military spending may not be any more effective in creating jobs than would be non-military spending. Some research has shown that non-military spending actually may create *more* jobs than defense-related spending (Pollin and Garrett-Peltier, 2009). The study covered domestic policy areas such as clean energy, health care and education. What would happen to unemployment if spending on such programs were to increase by quantum leaps? What if FDR had seen to it that as much was spent on New Deal programs in 1933 as on national defense in 1941? Would the Depression have ended in his first term? Be that as it may, the fact is that FDR did not propose such a surge in domestic spending in 1933, nor would the Congress have approved it. The political will for such action did not exist then or now.

5. Conclusion

Using a surprisingly rich trove of polling data on presidential approval from late 1937 to 1945, we demonstrate that the American public suspended the economic-voting logic during World War II. In peacetime the ups and downs of FDR approval closely follow the unemployment rate, but this effect vanishes once the U.S. makes the transition to wartime. It is as if the economy ceases to matter to the American public once the president donned the mantle of commander in chief, putting the New Deal on hold. Such a powerful effect of war on economic voting has rarely, if ever, been demonstrated before. It begs the question of whether World War II constitutes a special case and if so, what makes it so?

American entry into World War II, among other things, sparked a surge in military spending on a scale never seen before. Just to cite a couple of figures, military spending rose from less than $2 billion dollars in 1939 to almost $100 billion in 1944, an amount that exceeded the total GDP of every year from 1930 to 1939. At the same time, the economy boomed and unemployment lines vanished. The U.S. economy finally showed signs of a full recovery from the Great Depression. So it is compelling to attribute the economic recovery to military spending rather than the New Deal. Using data on government spending for the period 1929–1950, we demonstrate that military spending had a huge effect on unemployment while the effect of non-military spending proves negligible and non-significant. The inclusion of the pre-FDR years (1929–1932) gives us leverage to assess the possibility that the New Deal may have sparked some recovery from the Depression. Judging by the amount of non-defense federal spending, the impact on unemployment was extremely small. The inclusion of the post-war years (1946–1950) helps us deal with the reconversion to a peacetime economy, including sudden and big cutbacks in military spending when the war ended. Our findings show that it does not require the peak level of military spending to

achieve full employment. Whatever the United States spent on defense in 1941, a level to which it returned after the war, achieved that goal, practically speaking. Hence active participation in the war was not necessary for the U.S. to fully recover from the Depression, but high-level preparation for war was.

As for domestic spending, our findings imply that it is ineffective in bringing down unemployment. At the level of spending that prevailed during the period of study that may very well be so. But if it were pushed to the level attained by military spending during the war, domestic spending may have produced similar macro-economic results in employment. The question is, does the political will exist to raise domestic spending to such lofty levels? The answer is certainly a No, then and now. In the absence of a mortal threat to a nation's security from abroad it would be nearly impossible to imagine such an explosion of government spending.

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