

NBER WORKING PAPER SERIES

INFLATION, WAR BONDS, AND THE RISE OF REPUBLICANS IN THE 1950S

Gillian Brunet
Eric Hilt
Matthew S. Jaremski

Working Paper 31969
<http://www.nber.org/papers/w31969>

NATIONAL BUREAU OF ECONOMIC RESEARCH
1050 Massachusetts Avenue
Cambridge, MA 02138
December 2023

We would like to thank seminar audiences at Rutgers University, the University of Pittsburgh, and the Harvard-BU economic history workshop for helpful comments. The authors have no financial relationships that might bear on this research. The views expressed herein are those of the authors and do not necessarily reflect the views of the National Bureau of Economic Research.

NBER working papers are circulated for discussion and comment purposes. They have not been peer-reviewed or been subject to the review by the NBER Board of Directors that accompanies official NBER publications.

© 2023 by Gillian Brunet, Eric Hilt, and Matthew S. Jaremski. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including © notice, is given to the source.

Inflation, War Bonds, and the Rise of Republicans in the 1950s
Gillian Brunet, Eric Hilt, and Matthew S. Jaremski
NBER Working Paper No. 31969
December 2023
JEL No. E20,E31,H6,N1,N22,N42

ABSTRACT

We study the role of war bonds and inflation in the presidential elections of the 1950s. During World War II, the federal government conducted aggressive campaigns to convince Americans to invest their savings in wartime savings bonds. Although the bonds were nonnegotiable and protected from interest rate fluctuations, two major inflationary episodes after the war, in 1946-48 and 1950-51, eroded the real value of their returns, contributing to a political backlash against the incumbent Democrats. In a difference-in-differences framework, we find that counties with higher war bond purchases shifted their votes towards the Republican party in the postwar elections, relative to the elections of the late 1930s and early 1940s. To address concerns related to the endogeneity of war bond purchases, we instrument for WWII bond subscriptions using participation rates from the World War I liberty bonds, and find similar results. Our results indicate that the promotion of savings bonds made Americans more sensitive to the high inflation that prevailed after the war, contributing to Republicans' victories in the 1950s.

Gillian Brunet
Wright Hall #226
Smith College
Northampton, MA 01063
gbrunet@smith.edu

Eric Hilt
Wellesley College
Department of Economics
106 Central Street
Wellesley, MA 02481
and NBER
ehilt@wellesley.edu

Matthew S. Jaremski
Utah State University
Department of Economics and Finance
3565 Old Main Hill
Logan, UT 84322
and NBER
matthew.jaremski@usu.edu

1. Introduction

During World War II (WWII), the American government waged an aggressive campaign to convince its citizens to invest in war bonds. Through a payroll deduction program and a series of eight bond drives, households purchased war savings bonds at very high rates, with more than 85 million Americans subscribing. This reallocation of Americans' savings had far-reaching consequences, not all of which were anticipated. The government-led drives sought to convince Americans that savings bonds were excellent investments; surveys from the period indicate that households were persuaded, and considered those assets the key to their financial futures. Yet in the years following the war, high inflation substantially eroded the purchasing power of the bonds' returns, leading many Americans to feel bitter. Republicans blamed the incumbent Democrats for the increases in the price level, and made controlling inflation a central promise of their successful campaigns in the 1950s.

We study the role of war bonds in the presidential elections of the 1950s. After two decades of dominance by Democrats, the Republicans won the presidency in 1952 and 1956, and inflation was a major issue for voters in both elections. Whereas inflation had benefitted the Democrats' electoral fortunes in the 1930s following the deflationary years of the Great Depression, many voters perceived the high rates of inflation that prevailed following WWII as harmful (Lubell, 1951). Using a difference-in-differences design with a panel of counties and state-by-time fixed effects, we test whether purchases of wartime savings bonds contributed to increased support for the Republicans in the 1950s. Our results indicate that counties with higher war bond purchases shifted their preferences towards the Republican Party in the postwar elections at higher rates, relative to their voting patterns in the elections of the late 1930s and early 1940s, and relative to other counties within the same state. War bond purchases thus created a new constituency for anti-inflationary policy, which was promised by the Republicans.

The changing magnitude of the effects we estimate across different elections highlights the importance of inflation in our results. There were two major inflationary episodes following WWII, in 1946-48 and 1950-51. The inflation of 1946-48 following the relaxation of wartime price controls was generally anticipated, and both survey data and narrative evidence from economists at the time indicate deflation was expected to follow the immediate burst of post-WWII inflation. Our estimates indicate that the impact of war bonds on the 1948 election was muted.

By contrast, the surge in inflation in 1950-51 at the outbreak of the Korean War was unexpected and made clear that there would be no prolonged deflation to restore the purchasing power of war savings bonds. President Truman's efforts in 1951 to pressure the Federal Reserve to continue to peg interest rates at low levels rather than pursue a policy change aimed at curtailing inflation likely strengthened the association between the Democratic Party and high inflation. In the 1952 election, Eisenhower and the

Republicans won with a platform that argued that the Democrats would “further cheapen the dollar, rob the wage earner, impoverish the farmer and reduce the true value of the savings, pensions, insurance and investments of millions of our people” if they remained in power. Inflation peaked prior to the 1952 election and remained low over the next four years. In 1956, Eisenhower won again, with a party platform that boasted of having “fulfilled our 1952 pledge to halt the skyrocketing cost of living.” In 1952 and 1956, we find large and significant effects of war bond purchases on the Republicans’ vote share.

A natural concern regarding these results could be that wealthier counties were likely to have purchased more war bonds, and may have shifted their support toward the Republicans in the 1950s for reasons unrelated to the bonds’ returns. We address this concern in a variety of ways. First, we control for median wage income in 1940, which we calculate from the federal census. Second, we control for the value of war spending per capita, a major source of wartime income, and the value of bank deposits per capita, a measure which reflects wartime savings that were not allocated to war bonds. Importantly, we find that funds allocated to bank accounts had much weaker effects on voting outcomes than savings bond purchases, even though both reflect local savings (and therefore income). The difference in these estimated effects suggests that households felt their war bonds were uniquely important, and had been convinced that they would be a good long-term investment by the messages of the bond drives. We also control for numerous social and economic characteristics of counties that were likely related to war bond subscriptions and political preferences.

Of course, it is possible that unobservable factors correlated with war bond purchases may have led some counties to turn against the Democrats in the 1950s. To address this possibility, we instrument for WWII savings bond purchases using participation rates in the liberty bond drives of World War I (WWI). The WWI bond drives were quite successful and generated high participation rates in many counties. Variation in liberty bond subscription rates was driven in part by the approaches taken to the marketing of the bonds, with some counties adopting a centralized organizational system that was quite effective (see Hilt et al., 2022). During WWII, the Treasury promoted war bonds with bond drives modeled on those of WWI. The local lessons learned from the liberty bond drives were remembered and adopted in the promotion of WWII savings bonds.

Although they are only available for half of US counties, liberty bond participation rates predict E bond purchases quite well in those counties. By contrast, we present results of a falsification test indicating that liberty bond participation rates do not predict 1944 bank account inflows. This contrast suggests that liberty bond participation influenced E bond sales through its effect on local efforts in the bond drives, rather than through factors such as income or wealth that would also have influenced bank deposits. We also show that liberty bond participation is correlated with changes in the Republican vote share only for elections after 1944, which rules out the concern that counties with higher liberty bond

participation had a general preference for Republicans. Our 2SLS results using this instrument produce estimates reasonably similar to those obtained via OLS. This suggests that variation in unobservable factors that could have been responsible for both higher E bond subscriptions and subsequent changes in political preferences are unlikely to be responsible for our results.

Another concern regarding our results might be that they are driven by ideological preferences, rather than financial motives. For example, voters who strongly supported the war effort in WWII by purchasing E bonds at high rates may have shifted their support to the Republicans during the Cold War, if they were persuaded that the Democrats were ‘soft on communism.’ Yet when we control for other nonfinancial measures of support for the war effort in WWII, including the rates at which a county’s population volunteered for the war or won medals for distinguished service, from Caprettini and Voth (2023), we find that E bond subscription rates still had a uniquely large and significant effect on the Republican vote share. This suggests that the financial attributes of E bonds, rather than their association with support for the war, are responsible for their political effects.

These results highlight the importance of WWII financing policies for the subsequent evolution of American politics. Efforts to promote war savings bonds served multiple objectives: they channeled household resources into long-term savings vehicles, holding down wartime inflation by reducing demand for scarce consumption goods; they raised funds to support the war effort; and, perhaps most importantly, they created opportunities to present the public with propaganda touting the importance the war, and to encourage participation in rallies and parades supporting the American war effort. Yet by inducing Americans to purchase war savings bonds with promises that they would be excellent long-term investments, these campaigns made American households more sensitive to inflation, magnifying its impact on voters’ preferences.

The importance of inflation as a factor in American elections over the twentieth century was established by the first systematic empirical studies of economic voting (Kramer, 1971; Stigler, 1973), and remains an important focus of elections research (e.g., Palmer and Whitten, 1999; Lewis-Beck and Stegmeier, 2000). We advance this literature by using local variation in the purchases of an asset—war bonds—whose realized returns were unexpectedly reduced by inflation to study the impact of inflation on election outcomes. A more recent line of research has analyzed the connection between local economic conditions and support for populist or authoritarian political parties.¹ Our focus on a period when many households became significant creditors marks an interesting contrast to the focus on the political motives of debtors in many of those works (e.g., Gyöngyösi and Verner, 2022). Our analysis of war bond

¹ Examples include de Bromhead et al. (2013), Funke et al. (2016), Doerr et al. (2020), Ahlquist et al. (2020), and Galofré-Vilà et al. (2021). See Rodrik (2021) for a survey.

purchases also contributes to a related literature on the effects of asset ownership on political behavior (e.g., Duca and Saving, 2008; Nadeau et al., 2010; Jha and Shayo, 2019; Hilt and Rahn, 2020).

The changing partisan alignment of the American electorate over the mid-twentieth century has been the subject of considerable research, and our results help explain some of the shifts observed in the 1950s. The Great Depression and 1932 election realigned American voters, shifting the loyalties of large segments of the electorate toward the Democrats (Burnham, 1970; Clubb et al., 1980; Sundquist, 1983). The association between the Republican Party and economic depression persisted through the 1950s (Campbell et al., 1964), but our analysis helps explain the Republicans' success in that decade as a response to inflation. Our results also help explain some of the shifts in the geographic patterns of support between the parties beginning in the 1950s, although other factors were more important in those changes (see, for example, Black and Black, 2003; Bazzi et al. 2023).

Finally, our paper contributes to the literature on the financing of America's efforts in WWII (e.g., Rockoff, 1995, 2012; Ohanian, 1997; Hall and Sargent, 2011; Acalin and Ball, 2023). The war bond drives in particular have been the subject of considerable research, which includes some early foundational contributions to the study of social psychology (Merton, 1946) and behavioral economics (Katona, 1951), as well as modern works across a range of disciplines (e.g., Samuel, 1997; Kimble, 2006; Sparrow, 2008). Some of this work has argued that WWII transformed the role of the federal government by eroding popular opposition to a powerful national state and inculcating in Americans a sense of 'fiscal citizenship' (e.g., Sparrow, 2008, 2011; Brinkley, 1989). We advance this literature by quantitatively analyzing the largely unanticipated political consequences of war bond purchases, which expanded the constituency for anti-inflation policy.

2. The Bond Drives of World War II

The US economy transformed into the "great arsenal of democracy" after Pearl Harbor, as war production ramped up to levels that had previously been inconceivable. Leading figures within the U.S. Treasury and Federal Reserve debated different approaches to financing the government's extraordinary level of expenditures. Ultimately, the spending was financed by a mix of taxes, borrowing, and money creation (Rockoff, 2012).

Raising money from households was viewed as a key objective of the war finance program. Given that much of civilian manufacturing would be converted to war production, policymakers feared that rising incomes in combination with limited supplies of consumption goods could produce rapid inflation, a problem highlighted by Keynes (1940). Some policymakers, including Fed Chairman Marriner Eccles and budget director Harold Smith, argued that it was necessary to adopt compulsory

savings measures to capture a sufficient share of household incomes. Yet President Roosevelt and Treasury Secretary Morgenthau disagreed and insisted on voluntary savings programs, in part because they feared that Congress would lower tax rates if a compulsory program were enacted, but also because they felt that the promotion efforts behind a voluntary campaign could be used to strengthen support for the war effort, and “make the country war-minded – there just isn’t any other way to do it” (Morgenthau, quoted in Blum, 1967: 19). In response to a public that was initially reluctant to get involved in another war in Europe, Roosevelt and Morgenthau “used *bonds* to sell the *war*, rather than vice versa” (Harold Smith, quoted in Blum, 1967: 19-20, emphasis in original).²

The design of the war savings bonds benefitted from lessons learned in WWI. The liberty bonds sold during that war were negotiable instruments, whose market prices fell when interest rates rose, resulting in capital losses to many households who sold them prior to maturity. In addition, the smallest denomination liberty bond was \$50, a large sum relative to incomes at the time (see Kang and Rockoff, 2015). In WWII, a new series of non-negotiable savings bonds, which had been developed in the 1930s, was sold to households, while marketable securities were sold to institutions. The new series E savings bonds marketed to households during wartime were offered in denominations as low as \$25, and paid a nominal interest rate of 2.9 percent compounded semi-annually if held to maturity, which was higher than the rates offered by the securities sold to institutions. Owners of savings bonds could not resell them, but could redeem them at a fixed series of values, which protected the holder against interest rate fluctuations, and were structured to incentivize holding them to maturity—early redemptions received lower annual rates of return. Series E bond purchases were restricted to individuals, with annual subscription limits (\$5,000 maturity value per person); wealthy households could supplement E-bond purchases by buying larger quantities of other savings bonds (series F and G) offering slightly lower returns, or other government securities.

Sales of E bonds began in May 1941, as the Treasury’s Defense Savings Staff (later renamed War Savings Staff) began advertising and promoting bond ownership. The staff also promoted a payroll savings plan, in which workers were encouraged to deduct 10 percent from their paychecks to purchase war bonds. After a relatively slow start, sales surged following the attack on Pearl Harbor. In early 1942, several national campaigns were conducted to promote war bonds, such as the “Stars Over America” campaign, which sent groups of celebrities around the country (Olney, 1971). Yet the Treasury felt that the sales of E bonds failed to capture a sufficient share of household incomes, and sought to better coordinate the sales efforts of the many state and local organizations marketing the bonds. Ultimately,

² Evidence of the public’s reluctance to support joining the war prior to Pearl Harbor is illustrated a Gallup poll from October 1941; at the time, 82 percent of respondents opposed sending “part of our Army to Europe to help Britain” (Gallup Poll 1941-0251, Question 17; 3,066 respondents). Although public sentiment shifted quickly in response to Pearl Harbor, a resurgence of isolationist sentiments was a concern among American policymakers.

policymakers chose to emulate the bond drives of WWI, in which sales goals over a specific period were announced and intensive campaigns to reach the goal were conducted. After a successful pilot test of a bond drive in the town of Vineland NJ, the approach was adopted nationally, and ultimately eight drives (called “war loans”) were conducted.

Movie stars, government officials, popular musicians, authors, hundreds of civil society organizations, and a volunteer sales force of more than five million people were enlisted in these drives, which were seen by the federal government not only as a way to increase bond sales, but also to blanket the population with propaganda in support of the war effort. The message of the drives framed bond subscriptions as patriotic obligations to fund the fight against tyranny and preserve the ‘American way of life.’ But they also highlighted the attractiveness of the war bonds as investments. For example, the campaign book created by the planners of the fourth bond drive in 1944 stated:

to pass up the purchase of War Bonds is to deny yourself ownership of the most desirable and safest investment in the world today... To deny yourself that investment today is to miss the opportunity for guaranteeing the future security of your family, your children and your country (Olney 1971: 78).³

The drives also discouraged households from redeeming their bonds early, with slogans that emphasized that war bonds were ‘to have and to hold.’ One promotional film, entitled *These Are Your Bonds* (1944), featured President Roosevelt telling Americans that “to buy and hold all that we can of war bonds” is “a small service to ask of those who do not fight.”

Table 1 presents some details of these bond drives. The vast majority of the funds raised came from the sale of Treasury securities to institutions, but E bond sales to households were always a major focus of the drives. The Treasury conducted extensive research into its sales methods and adapted its approach over time as it learned what worked best. The first and second drives had no specific goal for E bond sales, and although the total funds raised far surpassed its overall goal (\$12.9 billion compared to a goal of \$9 billion), sales of E bonds were regarded as disappointing, reaching only \$726 million. Later drives set explicit goals for E bond sales and made intensive use of personal solicitations, advertising, and various other marketing strategies that the Treasury’s research determined to be effective. The goals for E bond sales for many of the drives were quite aggressive and were not always met; the third drive had a goal of \$3 billion for E bonds, whereas \$2.5 billion were sold, and the seventh had a goal of \$4 billion, and just under that amount were sold. Nonetheless, the ambitious drives were considered generally successful at mobilizing household resources.

Figure 1 presents monthly sales of E bonds from May 1941 to June 1946. The surge in December 1941 and January 1942, following the attack on Pearl Harbor, is evident in the figure. The growing

³ The campaign book guided the creation of posters, speeches, and other campaign materials for the bond drive.

monthly sales throughout 1942 reflected the increasing success of the payroll savings plan and the sales campaigns conducted in that year. The first bond drive in December 1942 is barely visible in the figure; sales were not much higher than they would have been without the drive. Yet most of the later bond drives are clearly visible in the figure, and represent substantial increases in sales; the Treasury's approaches to the conduct of the drives benefitted from experience. In the end, about 53 percent of the wartime E bond sales were a product of the bond drives with the remaining 47 percent driven by payroll savings plan (Murphy, 1950). In total, about \$40 billion of E bonds were sold from May of 1941 through December 1945, and the bonds continued to be sold in later years.⁴ In the peak year of war bond sales, 1944, net sales of savings bonds accounted for 9.7 percent of personal after-tax income.

During the war years, personal savings reached unprecedented levels (see Figure 2). A number of factors contributed to this surge in savings, including increased incomes and labor force participation due to war production, and the strict rationing of durable consumption goods (see Brunet and Hlatshwayo, 2023). Whether or not the bond drives and payroll savings program actually increased household savings, or merely converted the form in which savings were held, has been the subject of some debate (e.g., Friedman and Schwartz, 1963: 559; Murphy, 1950; Katona, 1951). Yet irrespective of whether the bond sales campaigns changed total savings, they certainly reallocated a substantial portion of them, convincing large numbers of Americans to purchase war bonds.

The rate at which E bonds were owned among the adult population over time, as reflected in Gallup poll responses, is shown in Figure 3. The effects of Pearl Harbor, the 1942 sales campaigns, and the bond drives are clearly evident in the figure; reported ownership rates rose from 21 percent in November 1941 to 65 percent in May 1942 to around 85 percent in 1944. The effects of the Treasury's sales campaigns on households' finances are evident in Table 2, which presents data on the liquid asset holdings of 16,119 households from the Survey of Consumer Finances over 1947 to 1951.⁵ On average, savings bonds accounted for about 34 percent of households' liquid assets; the share was slightly lower for households with below-median income, and higher among households with above-median income. Although many households held large savings account balances and other liquid assets, the returns realized from investing in war bonds were clearly important for most households.

⁴ The \$40 billion figure is calculated from the Treasury's annual reports, and counts gross revenues from sales of E bonds, without adjusting for redemptions.

⁵ The Survey of Consumer Finances is available from the Survey Research Center of the University of Michigan via ICPSR.

3. Inflation, Real E Bond Returns, And Voting

3.1 Inflation and Realized E Bond Returns

Although price controls and increased household saving limited wartime inflation, the surge in inflation after the war significantly eroded the real value of the returns paid by E bonds. Figure 4 presents monthly inflation rates from 1930 to 1960, as reflected in the change in the CPI relative to 12 months prior. As the figure makes clear, inflation rose during the war until price controls were imposed, was very high during 1946-48 following the relaxation of price controls, and surged again during 1950-51 with the outbreak of the Korean War.

The effect of these inflationary episodes on the real returns received by holders of E bonds varied somewhat with the timing of subscriptions. The returns of bonds purchased in 1941 and held to maturity suffered from the effects of the wartime inflation as well as the postwar inflation; those purchased at the end of the war were bought with dollars whose value had already been eroded by the wartime inflation, and therefore suffered somewhat less. Table 3 presents the annual returns realized by E bonds of different purchase dates, on the assumption that they were held to maturity (10 years). Real returns were negative no matter when the bonds were purchased, but the returns from bonds purchased early in the war were significantly worse than those purchased late in the war.

Many holders of E bonds chose to redeem them well before maturity, and the impact of inflation on the returns earned at redemption varied on the timing of their redemptions. In Figure 5, we use the official redemption schedule and realized inflation rates to compute the cumulative nominal and real returns at six-month intervals for an E bond purchased in mid-1944, the peak year of savings bond sales. The lines show the value of the nominal and real cumulative returns an investor would have received if they had chosen to redeem their bond at different dates.⁶ The cumulative nominal return did not grow at a constant rate: in order to provide an incentive for investors to hold their bonds rather than redeem them early, the redemption schedule of E bonds offered low nominal returns over the first five years, before increasing them over the second half of the bond's time to maturity. The surge in inflation in 1946-48 produced steeply negative returns over this period. An investor who redeemed their bond at any point after mid-1946 would have earned substantially negative real returns. After 1952, the higher nominal returns were greater than prevailing inflation rates, and cumulative real returns rose somewhat, but they were never better than -13 percent.

⁶ Cumulative real returns at time T are calculated at six month intervals as: $\prod_{t=0}^T \left(\frac{1 + \frac{P_t - P_{t-1}}{P_{t-1}}}{1 + \pi_t} \right) - 1$, where P_t is the redemption value at time t .

These returns were likely far lower than expected; in 1944, a Gallup poll found that 91 percent of adults had agreed that E bonds would be a “good investment.”⁷ Further evidence that these returns were lower than expected is presented as the dashed line in the figure, which shows the cumulative real returns that would have been earned if the inflation rate had been equal to forecast inflation. For each six-month interval, we use the forecast value of the CPI inflation rate from the Livingston Survey.⁸ The results show much higher cumulative real returns; if inflation had been equal to forecast values, at the time of the 1952 election, cumulative returns would have been about +10 percent, rather than -17 percent.

Although they were quite low, the E bonds’ real returns were actually better than those paid by savings accounts, the most important alternative to E bonds.⁹ Yet the low returns paid by E bonds may have been perceived as more significant than the returns paid by other assets. Surveys of consumers conducted by the Federal Reserve in 1945 found that the overwhelming majority of households did not intend to use their E bonds to purchase consumption goods, but instead reserved them for ‘permanent assets’ such as the purchase of a home or a farm (Weiler, 1945: 870). Consistent with the messages of the bond drives, which told Americans that E bonds were “The Greatest Investment on Earth,” and that they should “Plan Today [and] Build Tomorrow With War Bonds” on posters showing images of newly built suburban homes, American households considered their E bonds the key to their financial futures. The reduced purchasing power of the bonds’ payouts relative to what was initially expected may therefore have been regarded as particularly impactful and disappointing. By contrast, bank deposits were often seen as short-term savings for consumption, and thus less important—and perhaps also more likely to have been spent relatively quickly.

3.2 Inflation and Post-War Politics

The low real returns paid by E bonds suggest that a voter in the 1950s motivated by economic concerns and retrospectively evaluating the performance of the incumbent Democrats might decide to punish them and vote for the Republicans.¹⁰ Yet to evaluate that motive, it is important to understand what voters’ expectations of inflation had been; the significance of a given level of inflation may be a function of its relation to the level of inflation that had been expected.¹¹ The level of expected inflation at

⁷ Gallup poll 1944-0335, Question 21; 2,429 respondents.

⁸ Data from this survey of academic and professional forecasters was obtained from <https://www.philadelphiafed.org/surveys-and-data/real-time-data-research/livingston-historical-data>, accessed 10/23. We use the median forecast values of the CPI in six months to compute forecast inflation rates.

⁹ From 1936 to 1952, the maximum rate that Fed member banks could pay on time deposits and savings accounts was limited to 2.5% by Regulation Q, and the average rate paid on those accounts was close to 1% for most of that period (Federal Reserve Bank of St. Louis, 1960). By contrast, the nominal rate paid by E bonds held to maturity was 2.9%.

¹⁰ This is the retrospective voting hypothesis; see Fiorina (1981).

¹¹ On the importance of benchmarks and reference points, see Healy and Malhotra (2013).

the time of elections may also be important, if voters also incorporate prospective evaluations of the candidates into their decisions. There is some evidence to suggest that in elections where the incumbent is not on the ballot, as was the case in 1952, prospective evaluations become particularly important (Nadeau and Lewis-Beck, 2001).¹²

To understand inflation expectations, it is helpful to consider the deflationary episodes displayed in Figure 4. The substantial deflation in 1930-33 and the smaller deflation in 1938 were significant events, and contributed to persistent fears of an economic collapse following WWII. But they also may have contributed to expectations of deflation following periods of inflation—as were typical prior to WWII.

The surge in inflation that began in mid-1946 was a consequence of the relaxation of wartime price controls, which had artificially suppressed price increases. This immediate post-war inflation episode was widely expected. Inflation had been significant before strict price controls were adopted, so it was understood that the price controls had restricted inflation, and that their relaxation would cause inflation to increase. After several years of strict rationing, pent-up consumer demand was also widely expected—though ex post many observers were surprised by how long elevated consumer demand persisted. Many commentators expected deflation to follow the immediate post-war inflation as reconversion was completed and supply chain issues were resolved. And indeed, a mild deflation did occur in 1949, but it was much smaller than expected—and was quickly reversed after the outbreak of the Korean War in July 1950 (Friedman and Schwartz, 1963; Binder and Brunet, 2022). The outbreak of inflation associated with the Korean War was quite sudden, and also signaled to voters that there would be no major downward revision in prices that would raise the real returns of their financial asset holdings. Relative to the deflation that had been expected, the Korean War inflation was quite high.

Some evidence on household inflation expectations is available from the Survey of Consumer Finances, which asked respondents whether they expected the price level to rise or fall in the following year. Figure 6 presents the margin by which inflation or deflation was expected in each year from 1947 to 1953, calculated as the difference between the share expecting inflation, and the share expecting deflation. When the value is negative (positive), the share expecting deflation was larger (smaller) than the share expecting inflation, and the value of the series shows the size of the difference. These surveys were conducted during the first quarter of the year, so unfortunately they do not directly coincide with the timing of elections.

In the first quarter of 1948, respondents were equally likely to expect inflation and deflation, and by the first quarter of 1949, deflation was more widely expected than inflation. At the time of the 1948

¹² In 1952, President Truman chose not to stand for reelection; the Democrats nominated Illinois governor Adlai Stevenson.

election, voters likely expected mild deflation. This suggests that voters focused on prospective economic evaluations would not have had a strong motive to oppose the incumbent Democrats.

As the data presented in Figure 4 make clear, these expectations were not fulfilled. A sudden increase in inflation occurred at the onset of the Korean War. In 1952, a voter focused on retrospective economic evaluations might have concluded that inflation (and therefore the returns paid by their E bonds) was much worse than had been expected. In early 1952, many more voters expected inflation than deflation, so if those expectations persisted through the November election, voters may also have had a reason to prefer the Republicans on the basis of prospective economic evaluations, if they found the Republican's anti-inflation agenda convincing. Opinion poll data from September 1952, closer to the election date, indicate that at that time it was still the case that more households expected inflation than deflation.¹³

It is possible to track the changing political significance of inflation over time using opinion polls, which periodically asked respondents "What do you think is the most important problem facing this country today?" or similarly worded questions. In March of 1948, only 8 percent answered inflation, but in August 1952, 35 percent gave that answer.¹⁴ Perhaps because it was generally unexpected, and ended an expected deflation, the inflation of 1950-51 was much more politically significant. The erosion of the purchasing power of the returns paid by wartime savings bonds increased the salience and political significance of the inflation. Interviews with voters revealed a simmering frustration. "The Democrats are pushing too far... When I cashed [my war bond], I thought how much more I could have bought for the money back in 1940 than now. This inflation has got to be stopped" (Lubell, 1951: 161).

Inflation figured prominently in the presidential campaigns of the 1950s, especially on the Republican side. Eisenhower's 1952 campaign for president was the first to use television ads (Diamond and Bates, 1984). The majority of his campaign ads made some reference to inflation or the high cost of living.¹⁵ One specifically referred to the reduced purchasing power of bonds.¹⁶ The unusually significant role of inflation as an issue in the 1952 campaign is also illustrated in Figure 7, which presents a simple count of the number of sentences containing the word "inflation" or equivalent terms in the Republican

¹³ An Opinion Research Council poll in September with 1,619 respondents asked "Do you believe we are going to have serious inflation—that is, prices going way up and the dollar buying much less, or not?" In response 49 percent said yes, and 36 percent said no (Roper 31103145; <https://ropercenter.cornell.edu/ipoll>).

¹⁴ Gallup poll 1948-0415, and Roper Poll 1952-060. In Appendix Figure A1, we present the changing prevalence as an answer to this question over time.

¹⁵ The Democratic candidate, Adlai Stevenson, rejected the idea of an ad campaign, and instead relied on televised speeches, which the Eisenhower campaign also used (Wood, 1990).

¹⁶ The texts of all the Eisenhower campaign ads are presented in Wood (1990). In the ad referring to bonds, a man says: "Today they are saying you've never had it so good. Yet my pension won't even feed me and my wife." Eisenhower then appears on camera and replies "It's not just your pension, it's the same with our bonds, our savings, our Social Security. They've all gone down. Yes, it's time for a change."

and Democratic Party platforms from 1932-56.¹⁷ Over these years, the Republicans' platform typically mentioned inflation more frequently than the Democrats'. Even in 1932, a time of extraordinarily high unemployment and persistent deflation, the Republicans pledged to preserve a "sound currency and an honest dollar," and warned that "relief by currency inflation is unsound in principle and dishonest in results."¹⁸ Mentions of inflation rose for both parties in 1948, before increasing substantially in 1952, especially for the Republicans. In that year, the Republican Party's platform blamed inflation on the Democrats' policy choices, arguing:

The wanton extravagance and inflationary policies of the Administration in power have cut the value of the dollar in half and imposed the most confiscatory taxes in our history. These policies have made the effective control of Government expenditures impossible. If this Administration is left in power, it will further cheapen the dollar, rob the wage earner, impoverish the farmer and reduce the true value of the savings, pensions, insurance and investments of millions of our people. Further inflation must be and can be prevented.¹⁹

Opinion poll data indicates that voters were persuaded that the Republicans would be more likely to control inflation, perhaps because of that party's traditional advocacy for hard-money policies. One poll from August 1952 showed that more Americans felt that the Republicans would be better able to "keep prices from going higher" than the Democrats.²⁰

Inflation peaked prior to the 1952 election and remained low in the mid-1950s, in part due to a significant shift in the Fed policy, yet it remained an important issue in American politics over the rest of the decade. The 1956 Republican Party platform boasted of having "curbed the runaway inflation," and claimed that the Eisenhower Administration had fulfilled its pledge to "halt the skyrocketing cost of living that in the previous 13 years had cut the value of the dollar by half, and robbed millions of the full value of their wages, savings, insurance, pensions and social security."²¹ Polling data showed that this rhetoric was effective; voters in 1956 stated that the Republicans would "do the best job of holding down inflation" relative to the Democrats by a margin of 39 percent to 31 percent.²²

¹⁷ Equivalent terms include "high cost of living," "rising prices," "stable currency," "sound currency," "honest dollar," "integrity of our national currency," among others.

¹⁸ <https://www.presidency.ucsb.edu/documents/republican-party-platform-1932>.

¹⁹ <https://www.presidency.ucsb.edu/documents/republican-party-platform-1952>.

²⁰ Roper poll sponsored by NBC broadcasting, conducted August 1952 among 3,917 adults. In response to the question "we'd like to know which 2 or 3 [issues from a list] you think are most important for the next Administration," 57 percent chose "Keep prices from going any higher." The same survey later asked "Which party do you think would be more likely to...keep prices from going any higher--the Democrats or the Republicans?" and 37 percent answered the Republicans, compared to 22 percent for the Democrats (Roper 31097073; <https://ropercenter.cornell.edu/ipoll>).

²¹ The mention of social security is quite significant; far from attacking that pillar of the New Deal, the Republicans argued that controlling inflation would benefit its recipients.

²² Opinion Research Center Poll, August 1956, face-to-face interviews with 1,471 adults (Roper 31103157; <https://ropercenter.cornell.edu/ipoll>).

4. Empirical Analysis

4.1 Data

The analysis that follows focuses on county E bond subscription rates, as reported in the 1947 *Consolidated City and County Data Books*. The available data report only subscriptions during 1944; our main variable of interest is 1944 E bond purchases in thousands of dollars, scaled by the county's 1940 adult (21+) population. This is an imperfect measure of what we would want to observe, the share of the population that owned E bonds, as it reflects purchases per capita for one year only, rather than participation rates for the entire war. However, 1944 was the year of the highest level of E bond sales, and the correlation between state-level sales per capita in 1944 and total state-level sales per capita from 1941-47 is 0.989.²³

We match the E bond subscription data to data on county voting patterns from Clubb et al. (2006).²⁴ In order to control for county characteristics, we also match these counties to 1940 county characteristics as reported in historical federal censuses, as compiled in Haines (2010) and from the *County Data Books*. The *County Data Books* also include annual data on bank account balances.²⁵ Like E bond subscriptions, these balances reflect the level of income in a county, as well as savings behavior. Yet unlike the available E bond subscription data, bank balances reflect the stock of funds allocated to those accounts, rather than only the flow for that year. To construct a measure of flows into checking accounts in 1944, which is directly comparable to our measure of E bond subscriptions for that year, we decompose the 1944 stock of bank accounts into two components: the 1943 value of the stock, plus the difference between the county's balances at the end of 1944 and at the end of 1943—the 1944 flow. We include both components in our regression, and compare the effect of the latter to the effect of E bond subscriptions to determine whether E bond subscriptions had unique political effects.

We also include war spending data by county, which has been reconstructed from the microdata on individual war production contracts tabulated by the Civilian Production Administration (1946),²⁶ supplemented by war facilities spending as reported in the 1947 *County Data Book*. Finally, in order to

²³ Authors' calculations using 1939 population as denominator, from quarterly E bond sales data as reported in *Treasury Bulletins* dating from February 1942 to August 1947 (data ending with Q2 1947).

²⁴ We use the Republican vote share (plus Republican Equivalents) as reported in Clubb et al. (2006). However, in many Southern states, electors pledged to the Republican candidate appeared on the ballot as "Independents" and the dataset does not include those in the total for the Republicans or Republican Equivalents. In some cases (eg, Mississippi in 1952), the Republican vote share is recorded as 0, even though a substantial portion of the votes were cast for electors supporting Eisenhower. We have augmented the Republican vote share variable to reflect votes cast for Republican candidates; see Appendix Table A1.

²⁵ The banking data were digitized and made available to us by Paul Rhode.

²⁶ War production contracts are listed by the city and state of the main establishment of production. These locations were mapped to counties by Gillian Brunet and Elisabeth Perlman.

obtain a measure of pre-war wage income, we use the full-count microdata from the 1940 census to compute median wage income in each county, and the share of households whose income was top coded.

Appendix Table A2 presents summary statistics for our main variables, which are available for 2,950 counties. The mean and interquartile range for our measure of E bond subscriptions in 1944 (107 and 76 dollars, respectively) is quite similar to that of our measure of inflows into bank accounts in 1944 (115 and 75), making the estimates obtained for those two variables easily comparable.

To assess whether E bond owners supported Republicans at higher rates at all times, not just after the war, we use Gallup poll data on voting intentions. In a subset of the polls presented in Figure 3, respondents were asked which party they would prefer to win in the next election. In Appendix Figure A2, we present results of regressions in which we estimate the effect of E bond ownership on support for the Republican party among respondents. The data in the figure show that as the bond drives expanded war bond ownership among the population, the subset of the population owning E bonds became indistinguishable from the rest of the population in their political preferences.

4.2 Baseline Analysis

Some initial evidence indicating that E bond purchases may have played a role in Eisenhower's victory in 1952 is presented in Figures 8a and 8b. The top panel presents a map of E bond subscription rates in 1944, by county. The bottom panel shows the change in the Republicans' vote share between the presidential elections of 1944 and 1952, and is shaded so that areas that showed stronger support for Republicans are darker. There are many similarities between the two maps. The darker areas in the E bond map, such as parts of Iowa, northern counties in the plains states, and some counties in the far west correspond to places that shifted toward the Republicans at high rates. Likewise, the lighter areas of the E bond map, such as much of New Mexico, Missouri, Kentucky, and West Virginia, did not shift toward the Republicans. Yet there are also some significant differences; the general trend towards the Republicans in the South does not correspond to high E bond subscription rates in those places.

To analyze this variation more rigorously and expand the set of elections included, we construct a panel of county election data from 1936 to 1956. To sweep out the regional trends evident in Figure 8b, we include state-by-year fixed effects in our analysis. As income across counties was likely responsible for some of the variation in E bond purchases, and may also have been related to subsequent changes in political preferences, we control for our two bank account variables, inflows in 1944 and balances at the end of 1943. We first estimate regressions of the form:

$$Repshare_{ist} = \alpha_i + \gamma_{st} + \sum_{t=1936}^{1956} \delta_t ebonds44_i \times year_t + \beta_t X_i + \varepsilon_{ist}, \quad (1)$$

where $Repshare_{ist}$ is the percentage of the vote won by the Republican presidential candidate in county i , state s , and year t ; α_i is a county fixed effect; γ_{st} is state-by-year fixed effects; $ebonds44_i$ is the subscription rate for E bonds in 1944 (total sales in county i divided by 1940 adult population) in county i ; $year_t$ is year fixed effects; and X_i includes 1944 bank account inflows and 1943 bank account balances, also interacted with year fixed effects.

The results are presented in Figure 9, with 1944 as the excluded year. Reassuringly, the estimates in the figure show no evidence of differential changes prior to 1944; counties with high E bond subscription rates in 1944 were not trending toward the Republicans in presidential elections prior to that year. After the 1944 election, the effect of E bond subscriptions becomes positive in 1948, although only marginally significant, and then positive and highly statistically significant in 1952-56. These effects were modest in size, at least on average; a one-SD increase in E bond purchases led to a 1.22 percent increase ($= 0.063 \times 19.40$) in the 1952 vote share for the Republicans, whose average margin of victory across states was more than 10 percent.

A potential concern regarding those results might be that they simply capture the effect of higher-income counties (or counties that were different along other dimensions) turning toward the Republicans in 1952 for reasons other than E bonds and inflation. To investigate the role of county characteristics that may have influenced both E bond subscriptions and election outcomes, we estimate a version of our model with E bonds and many other county characteristics interacted with a post-1944 indicator, rather than separate year indicators:

$$Repshare_{ist} = \alpha_i + \gamma_{st} + \delta ebonds44_i \times post44_t + \beta_t X_i \times post44_t + \varepsilon_{ist}, \quad (2)$$

where $post44_t$ is the indicator for presidential elections after 1944, X_i is a vector of various county characteristic controls (also interacted with post-1944), and the other variables retain their previous definitions.

The results of these regressions are reported in Table 4. In column (1), we present the results of a specification that is analogous to the one used to produce Figure 9. We control for bank account balances in 1943, as well as bank account inflows in 1944, the same year in which we observe E bond purchases. The estimated effect of E bond purchases implies that on average over the postwar elections in our sample (1948-56), a one-SD increase in E bond sales led to an increase in the Republican vote share of 0.90 percentage points, an effect that is highly statistically significant, but modest in size.

The parameters for both bank account variables are positive, indicating that counties with higher levels of income and savings shifted toward the Republicans. Yet the estimated effect of inflows into bank accounts in 1944 was less than half the size of the estimate for E bonds, and the difference is

statistically significant ($p = 0.026$). This difference suggests that balances invested in E bonds were more politically significant than balances held in bank accounts, and that efforts to shift savings out of bank accounts and into E bonds had lasting political effects.

In column (2), we add per capita war production contracts, and find that war production had strongly negative effects on the change in Republican vote shares after 1944. War spending generated increases in incomes, and appears to have fostered loyalty to the Democratic party. In column (3), we add median wage income and the share of incomes that were top coded, which we calculate from the 1940 census. Median wage income had a small but significantly positive estimated effect on the Republican vote share, whereas the share of top-coded incomes does not seem to have mattered. In columns (4) and (5), we add several other measures of the social and economic structure of counties (from the 1940 census) that likely influenced voting patterns. Even with all these county characteristics (interacted with post-1944) included in the regression, the effect of E bond subscriptions remains quite robust.

Finally, in column (6), we add a measure of indebtedness in the county: the share of owner-occupied dwellings with mortgages. In principle, home owners with mortgages should have benefitted from higher inflation, which could have offset some or all of the reduction in purchasing power from their E bonds. Yet this measure is positively correlated with the change in the Republican vote share. The lack of a negative effect could be consistent with modern studies indicating that households are much more conscious of the effects of inflation on their assets than on their debts (Schnorpfel et al., 2022). Yet it could instead be a product of the fact that counties with more mortgages were likely different from other counties in ways that may have led them to support Republicans.

A plausible concern regarding these results might be that they are driven by strong effects in regions where E bonds sold particularly well, or where shifts in support for Republicans occurred for other reasons. In Table 5, we explore the robustness of our results to changes in the sample. In the columns of the table, we drop the South, the far west, the northeast, and the smallest counties (those in the bottom 5 percent of population), and in each case we obtain very similar estimates.²⁷ In column (6) of the table, we expand the sample from 1936-56 to 1928-68, including five more presidential elections over a total of 40 years. With this change in the sample, the magnitude of the estimated effect of E bonds decreases by about 40 percent, but remains significant, indicating that the effects were quite persistent.

²⁷ One noteworthy result from this exercise is that the coefficient on the share of the population that is Black, which is strongly positive, changes sign and becomes strongly negative when the South is dropped, reflecting gains in support for the Democrats within counties with large Black populations outside the South. The strong positive effect of the Black population share on support for the Republicans in the national sample was driven entirely by counties within the South, where Black Americans were generally disenfranchised. As Black and Black (2003: 22) note, in the South in the 1950s, “the size of the black population served as an indicator of racial traditionalism among white Democrats. The larger the black population, the more “southern Democratic” the behavior of native whites.” These white voters shifted differentially to the Republican party at very high rates in 1952, although from an extremely low base.

In Appendix Figure A3, we gauge the magnitude of the political impacts of E bonds using state-level data. We re-estimate (2) at the state level, and calculate an upper-bound value of the effects of E bonds by simply subtracting their estimated impact from the Republicans' vote share in each state (the state's 1944 E bond subscription rate \times the estimated impact of E bonds).²⁸ The counterfactual vote shares presented in the figure are substantially lower, by an average of 4.24 percentage points. Yet our estimates imply that the Democrats would have won only four more states with a total of 31 electoral votes, in an election the Republicans won 442 to 89. These results suggest that E bonds could have had substantial impacts on voting patterns, but the Republicans' margin of victory was so large that the E bond effects were unlikely to have been decisive.

4.3 IV Analysis

Our analysis includes a number of county characteristics associated with both E bond subscriptions and political preferences. Yet there remains the possibility that some unobserved time-varying factor correlated with E bonds may be responsible for our results. To address this concern, we instrument for E bond subscriptions in 1944 using participation rates for the liberty bonds of WWI. The 1918 participation rates for liberty bonds (measured as subscribers per capita) were driven in part by variation in local social capital and by the approaches taken to the marketing of the bonds, with some counties adopting a highly centralized approach that reached a large share of the population quite effectively (see Hilt et al. 2022; and Hilt and Rahn, 2020). In the bond drives of World War II, some communities adopted strategies that were similar to the ones they had used to promote liberty bonds, and experienced similar levels of success.²⁹

We present the first stage of our 2SLS estimation in Appendix Table A3. Liberty bond participation rates predict E bond subscriptions quite well; the estimate reported in column (1) implies that a one-SD increase in liberty bond participation raised 1944 E bond purchases by about \$12.60 per capita, which is equivalent to 12 percent of the mean value.³⁰ The F-statistic for the first stage is generally 13 to 14 across specifications.

A potential concern regarding the instrument could be that counties with higher liberty bond participation were more affluent in 1918, and any relationship between liberty bond and E bond

²⁸ This constitutes an 'upper bound' because it does not account for the effects of the other assets (such as bank accounts) that would have been held in greater amounts in the absence of E bonds.

²⁹ For example, in WWII Milwaukee Wisconsin constructed quotas for sales for each city block, and adopted a centralized approach to monitoring progress towards reaching those goals, which was similar to the approach that was used in the liberty bond drives in that city. Known as the "Milwaukee Plan," the approach was promoted by the War Finance Division of the Treasury ("Call for Canvassers," *Minute Man*, 15 September 1944, p. 5.)

³⁰ This is calculated as $0.104 \times 0.120 = 0.0126$, compared to a mean value of 0.106. All E bond variables are expressed in thousands.

subscriptions could be driven by persistent differences in affluence across counties, which might also be related to political preferences. To investigate this possibility, we use a falsification test. If liberty bond participation rates predict E bond subscriptions because they are correlated with affluence in 1944, then they should also predict per capita inflows into bank accounts in 1944, which are also a function of local affluence. Yet as we show in Appendix Table A4, they do not. This suggests that similarities in local efforts in the bond drives are responsible for the strong relationship between liberty bonds and E bonds. Both E bond subscriptions and bank deposit inflows were related to local incomes and savings preferences, but only E bonds were the focus of sales campaigns conducted by local volunteers and civil society organizations.

Another concern regarding the instrument could be that if liberty bonds and E bonds were related to social capital, then perhaps the differences across counties in social capital might also be related to political preferences. For example, counties with higher levels of social capital may have had a preference for Republicans. We test for this by estimating the reduced-form relationship between the Republican vote share and liberty bond subscription rates interacted with indicators for each election in our sample. If liberty bond subscriptions were associated with a general preference for Republicans, they should impact the Republican vote share in all the elections in our sample. If instead, their effect came through E bond subscriptions, then their effect should be present only in the elections after 1944. The results are presented in Figure 10. Reassuringly, liberty bond subscription rates have no differential effect on the Republican vote share in the elections up to 1944, and then exert a positive impact in the 1948-56 elections, consistent with an effect that operates through E bonds.

Our IV estimates are reported in Table 6. In column (1), we report a baseline OLS regression, which is the same as column (3) of Table 4, using the sample for which the instrument is available. Then in column (2), we instrument for $ebonds44_i \times post44_t$ with $libertybonds_i \times post44_t$, and estimate the same regression via 2SLS. The IV estimate in column (2) is larger than the OLS estimate, which likely reflects the fact that it is a Local Average Treatment Effect (LATE) obtained from ‘complier’ counties. These were counties that likely subscribed to E bonds at high rates not due to prosperity but due to well-organized sales campaigns. Unlike the wealthiest counties that were already strong supporters of the Republican Party, these counties may have been places where an unexpectedly low return from savings bonds may have had the potential to impact their voting preferences significantly.

In columns (3) through (5), we add the same controls as in Table 4. Although the estimated effect of E bonds varies somewhat in magnitude, we consistently find a strong positive effect on the Republicans’ vote share in presidential elections. This analysis helps rule out the possibility that the previous results are the product of unobserved county characteristics.

4.4 Ideology as an Alternative Explanation for the Results

The argument of this paper holds that economic motives were responsible for the positive relationship between E bond subscriptions and support for Republicans. Yet it is possible that ideological motives may instead account for that relationship. Counties subscribing to E bonds at high rates may have been more supportive of the war effort, and therefore more patriotic or nationalistic, which may have influenced their subsequent voting behavior if the Republican party's agenda or if Republican candidates became more appealing to voters with those views in the 1950s.

For example, the Republicans' candidate for president in 1952 and 1956, Dwight Eisenhower, may have been especially appealing to voters who were strongly supportive of the war effort.³¹ Eisenhower's appeal to those voters could potentially explain the strong effect of E bond subscriptions on the Republican vote share that we find in the years when he was their candidate (recall Figure 6). Yet in Appendix Table A5, we present estimates of Equation (2) applied to Congressional elections, and find effects very similar to the ones we obtained for presidential elections. This suggests that Eisenhower's candidacy for president is unlikely to be responsible for our results.

More difficult to rule out would be that voters who supported the war effort at higher rates also supported the Republicans at higher rates after 1944 due to that party's anticommunist agenda or due to Cold War foreign policy issues. Anticommunism was by no means unique to the Republicans; in 1947 President Truman enacted an executive order that led to the investigation of the loyalties of millions of government employees. Yet the Republicans accused the Democrats of being 'soft on communism' and were likely more appealing to nationalist or anticommunist voters. To address this concern, we use two alternative measures of support for the WWII effort: the rate at which people volunteered for service and the rate at which service members from the county were awarded medals, both from Caprettini and Voth (2023). To the extent that those variables identify the strength of support for the war effort in a county, their inclusion in our regressions as controls should help address this concern.

The results of regressions of the form of Equation (2) with those variables added as controls are reported in Table 7. In column (1), we present baseline estimates, and in column (2), we add the volunteers and medals variables. The volunteers variable is positively and significantly correlated with stronger support for Republicans after 1944, whereas the medals variable is not. Yet importantly, the coefficient on E bond purchases remains large and significant even conditional on those alternative measures of support for the war. In column (3), we add our full set of additional controls, and in column (4), we estimate our IV specification. The estimates we obtain for E bond remains similar to what was

³¹ As Supreme Commander of the Allied Expeditionary Force in Europe, Eisenhower had planned and commanded the D-Day invasion in 1944, and later served as Army Chief of Staff and Supreme Commander of NATO.

found with the same specification without the service variables, although the IV estimate is noisier. In column (4), the estimates of the effects of volunteers and medals are no longer distinguishable from zero.

It is impossible to conclusively rule out that E bonds were associated with a preference for the Republicans' hardline Cold War agenda or anticommunism. However, the fact that E bonds had a strong effect on the Republican vote share conditional on other measures of support for the war suggests that they affected voting behavior through their performance as financial assets, rather than simply as a reflection of voter ideology.

5. Conclusion

This paper has analyzed the role of war bond ownership in presidential elections in the 1950s. The E bonds were well designed for retail investors, and offered an attractive nominal return relative to prevailing interest rates. The promotion of E bonds encouraged American households to postpone consumption, which may have helped control inflationary pressures during the war, while also raising funds to finance war spending. More importantly, the program avoided the coercive measures that would have been necessary under the forced savings programs that were proposed as alternatives, and provided an opportunity to wage enormous propaganda campaigns in support of the war effort. In most respects, the E bond campaigns of WWII were a tremendous success.

Yet by inducing households to allocate their savings into E bonds with the claim that they would be excellent long-term investments, the campaigns made Americans more sensitive to inflation after WWII, broadening the constituency for anti-inflation policies. When an unexpected surge of inflation during the onset of the Korean War made it clear that a sustained postwar deflation would not occur, voters shifted their preferences towards the Republicans, who made controlling inflation a central campaign promise. We find that E bond ownership was a significant determinant of the shift in voters' preferences towards the Republicans, especially in the elections of 1952 and 1956.

With the benefit of hindsight, the Truman Administration's very public resistance to the Fed's efforts to control inflation in 1951 was a clear mistake. During WWII and in the years that followed, the Fed maintained a policy of pegging the interest rates paid by long-term government securities by purchasing them in large quantities. In response to high inflation in late 1950, the Fed sought to end this policy, but was vigorously opposed by Truman and the Treasury.³² Ultimately the conflict became heated,

³² Truman was motivated in part by a desire to protect households by preventing a depreciation in the values of Treasuries that would result from rate increases, which had happened with the WWI liberty bonds (see Hilt and Rahn, 2020). He apparently failed to recognize that E bonds were nonnegotiable and would not be affected by interest rate changes.

and was resolved through the negotiation of the Treasury-Fed Accord in 1951, which helped establish the foundations of the Fed's modern independence (see Hetzel and Leach, 2001; Conti-Brown, 2017).

The Republican Party's 1952 platform advocated for "A Federal Reserve System exercising its functions in the money and credit system without pressure for political purposes from the Treasury or the White House," calling attention to Truman's efforts to force the Fed to maintain lower rates. If Truman had permitted the Fed to alter its policy and act to control inflation at an earlier date, the costs of servicing the federal debt would have been higher, but the public might not have seen the Democrats as the party of high inflation.

References

- Acalin, Julien and Lawrence Ball. 2023. "Did the U.S. Really Grow Out of Its World War II Debt?" *NBER Working Paper Series*, number 31577.
- Ahlquist, John, Copelovitch, Mark, and Stefanie Walter. 2020. "The Political Consequences of External Economic Shocks: Evidence from Poland," *American Journal of Political Science* 64(4): 904-920.
- Bazzi, Sam, Ferrara, Andy, Fiszbein, Martin, Pearson, Thomas, and Patrick Testa. 2023. "The Other Great Migration: Southern Whites and the New Right," *Quarterly Journal of Economics* 138(3): 1577-1647.
- Binder, Carola and Gillian Brunet. 2022. "Inflation Expectations and Consumption: Evidence from 1951." *Economic Inquiry* 60(2): 954-974.
- Black, Earle and Merle Black. 2003. *The Rise of Southern Republicans*. Cambridge, MA: Harvard/Belknap.
- Blum, John Morton. 1967. *From the Morgenthau Diaries: Years of War, 1941-45* (vol. III). New York: Houghton Mifflin.
- Brinkley, Alan. 1989. "The New Deal and the Idea of the State," in Steve Frasier and Gary Gerstle, eds., *The Rise and Fall of the New Deal Order, 1930-1980*. Princeton: Princeton University Press.
- de Bromhead, Alan, Eichengreen, Barry and Kevin H. O'Rourke. 2013. "Political Extremism in the 1920s and 1930s: Do German Lessons Generalize?" *Journal of Economic History* 73(2): 371-406.
- Brunet, Gillian and Sandile Hlatshwayo. 2023. "War, Pandemic, and Household Saving: the COVID-19 Pandemic through the Lens of WWII." Working paper.
- Burnham, W. D. 1970. *Critical elections and the mainsprings of American politics*. New York, NY: W.W. Norton.
- Bureau of the Census and Inter-university Consortium for Political and Social Research. 2012. "County and City Data Book [United States] Consolidated File: County Data, 1947-1977." ICPSR07736-v2. Ann Arbor: Inter-university Consortium for Political and Social Research [distributor], 2012-09-18.
- Campbell, Angus, Converse, Philip E., Miller, Warren E., and Donald E. Stokes. 1964. *The American Voter: An Abridgement*. New York, NY: John Wiley.
- Caprettini, Bruno, and Hans-Joachim Voth. 2023. "New Deal, New Patriots: How 1930s Government Spending Boosted Patriotism During World War II," *Quarterly Journal of Economics* 138(1): 465-513.
- Caughey, Devin, Adam J. Berinsky, Sara Chatfield, Erin Hartman, Eric Schickler, and Jasjeet J. Sekhon. 2020. *Target Estimation and Adjustment Weighting for Survey Nonresponse and Sampling Bias* (Elements in Quantitative and Computational Methods for the Social Sciences). Cambridge: Cambridge University Press
- Civilian Production Administration. 1946. *Alphabetic listing of major war supply contracts: cumulative June 1940 through September 1945*.
- Clubb, Jerome M., Flanigan, William H., and Nancy H. Zingale. 2006. "Electoral Data for Counties in the United States: Presidential and Congressional Races, 1840-1972." ICPSR08611-v1. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2006-11-13.
- Clubb, Jerome M., Flanigan, William H., and Nancy H. Zingale. 1980. *Partisan realignment: Voters, parties, and government in American history*. Beverly Hills, CA: SAGE.
- Conti-Brown, Peter. 2017. *The Power and Independence of the Federal Reserve*. Princeton: Princeton University Press.
- Diamond, Edwin and Stephen Bates. 1984. *The Spot: The Rise of Political Advertising on Television*. Cambridge: MIT Press.
- Doerr, Sebastian, Gissler, Stefan, Peydro, Jose-Luis, and Hans-Joachim Voth. 2020. "From finance to fascism: The real effect of Germany's 1931 banking crisis," *Barcelona GSE Working Paper No.* 1092.

- Duca, John V., and Jason L. Saving. "Stock Ownership and Congressional Elections: The Political Economy of the Mutual Fund Revolution." *Economic Inquiry* 46(3): 454–79.
- Federal Reserve Bank of St. Louis. 1960. "Interest Rates on Time Deposits," *Monthly Review* 42(5): 3-5.
- Fiorina, Morris. 1981. *Retrospective Voting in American National Elections*. New Haven: Yale University Press.
- Friedman, Milton, and Anna J. Schwartz. 1963. *A Monetary History of the United States, 1867-1960*. Princeton: Princeton University Press for NBER.
- Funke, Manuel, Schularick, Moritz, and Christoph Trebesch. 2016. "Going to Extremes: Politics after Financial Crises, 1870–2014." *European Economic Review* 88: 227–260.
- Gregori Galofré-Vilà, Meissner, Christopher M., McKee, Martin, and David Stuckler, 2021. "Austerity and the Rise of the Nazi Party," *Journal of Economic History* 81(1): 81-113.
- Gyöngyösi, Gyozo, and Emil Verner. 2022. "Financial Crisis, Creditor-Debtor Conflict, and Populism," *Journal of Finance* 77(4): 2471-2523.
- Haines, Michael R. 2010. . "Historical, Demographic, Economic, and Social Data: The United States, 1790–2002." ICPSR02896-v3. Ann Arbor: Inter-university Consortium for Political and Social Research [distributor], 2010-05-21.
- Hall, George and Thomas Sargent. 2011. "Interest Rate Risk and Other Determinants of Post-WWII US Government Debt/GDP Dynamics," *AEJ: Macro* 3: 192-214.
- Healy, Andrew and Neil Malhrota. 2013. "Retrospective Voting Reconsidered," *Annual Review of Political Science* 16:285-306.
- Hetzel, Robert, and Ralph Leach. 2001. "The Treasury-Fed Accord: A New Narrative Account," *Federal Reserve Bank of Richmond Economic Quarterly*, 87(1): 33-55.
- Hilt, Eric, Jaremski, Matthew and Wendy Rahn. 2022. "When Uncle Sam introduced Main Street to Wall Street: Liberty Bonds and the transformation of American finance." *Journal of Financial Economics* 145(1): 194-216.
- Hilt, Eric, and Wendy Rahn. 2020. "Financial Asset Ownership and Political Partisanship: Liberty Bonds and Republican Electoral Success in the 1920s." *Journal of Economic History* 80(3): 746-781.
- Jha, Saumitra, and Moses Shayo. 2019 "Valuing Peace: The Effects of Financial Market Exposure on Votes and Political Attitudes," *Econometrica* 87(5): 1561-1588.
- Kang, Sun Won, and Hugh Rockoff. 2015. "Capitalizing Patriotism: The Liberty Loan Drives of World War I," *Financial History Review* 22(1): 45-78.
- Katona, Geoge. 1951. *Psychological Analysis of Economic Behavior*. New York: McGraw Hill.
- Keynes, John M. 1940. *How To Pay For the War*. London: MacMillan.
- Kimble, James J. 2006. *Mobilizing the Home Front: War Bonds and Domestic Propaganda*. College Station: Texas A&M Press.
- Kramer, Gerald H. 1971. "Short-Term Fluctuations in U.S. Voting Behavior, 1896-1964," *American Political Science Review*," 65(1): 131-143.
- Lewis-Beck, Michael S., and Mary Stegmaier. 2000. "Economic Determinants of Electoral Outcomes," *Annual Review of Political Science* 3: 183-219.
- Lubell, Samuel. 1951. *The Future of American Politics*. New York: Harper Colophon.
- Merton, Robert K. 1946. *Mass Persuasion*. New York: Harper & Bros.
- Mississippi. 1960. *Mississippi Official and Statistical Register, 1956-1960*. Jackson, MS: Mississippi Secretary of State.
- Murphy, Henry C. 1950. *The National debt in war and transition*. New York, McGraw-Hill.
- Nadeau, Richard, Foucault, Martial, and Michael S. Lewis-Beck. 2010. "Patrimonial Economic Voting: Legislative Elections in France," *West European Politics* 33(6): 1261-1277.
- Olney, Laurence M. 1971. *The war bond story*. Washington DC: U.S. Savings Bond Division.
- Ohanian, Lee. 1997. "The Macroeconomic Effects of War Finance in the United States: World War II and the Korean War," *American Economic Review* 87(1): 23-40.
- Palmer, Harvey D., and Guy D. Whitten. 1999. "The Electoral Impact of Unexpected Inflation and Economic Growth," *British Journal of Political Science* 29: 623-639.

- Rockoff, Hugh. 1995. "From Ploughshares to Swords: The American Economy in World War II," *NBER Working Paper Series on Historical Factors in Long-Run Growth*, number 77.
- Rockoff, Hugh. 2012. *America's Economic Way of War*. New York: Cambridge University Press.
- Rodrik, Daniel. 2021. "Why does globalization fuel populism? Economics, culture, and the rise of right-wing populism," *Annual Review of Economics* 13: 133-70.
- Samuel, Lawrence R. 1997. *Pledging Allegiance: American identity and the bond drives of World War II*. Washington DC: Smithsonian Institute Press.
- Schnorpfeil, Philip, Weber, Michael, and Andreas Hackethal. 2023. "Households' Response to the Wealth Effects of Inflation," *NBER Working Paper Series*, number 31672.
- Sparrow, James T. 2008. "Buying Our Boys Back": The Mass Foundations of Fiscal Citizenship in World War II" *Journal of Policy History* 20(2): 263-86.
- Sparrow, James T. 2011. *Warfare State: World War II Americans and the Age of Big Government*. Oxford: Oxford University Press.
- Stigler, George J. 1973. "General Economic Conditions and National Elections," *American Economic Review, Papers and Proceedings* 63(2): 160-167.
- Sundquist, J. L. 1983. *Dynamics of the party system: Alignment and realignment of political parties in the United States (Rev. ed.)*. Washington, DC: The Brookings Institution
- U.S. Treasury. [various years] *Annual Report of the Secretary of the Treasury on the State of the Finances*. Washington, DC: GPO.
- Weiler, Emanuel T. 1945. "Surveys of Liquid Asset Holdings," *Federal Reserve Bulletin*, September, 865-71.
- Wood, Stephen C. 1990. "Television's First Political Spot Ad Campaign: Eisenhower Answers America," *Presidential Studies Quarterly* 20(2): 265-283.

Table 1: Bond Drives of World War II (Amounts in Billions of Dollars)

	First Dec '42	Second Apr-May '43	Third Sep-Oct '43	Fourth Jan-Feb '44	Fifth Jun-Jul '44	Sixth Nov-Dec '44	Seventh May-Jun '45	Victory Oct-Dec '45
Total Goal	9	13	15	14	16	14	14	11
Total Raised	12.9	18.6	18.9	16.7	20.6	21.6	26.3	21.1
Goal for E Bonds	--	--	3	3	3	2.5	4	2
Raised from E Bonds	0.726	1.473	2.5	3.2	3.036	2.9	3.976	2.2

Source: Annual Report of the Secretary of the Treasury, various years.

Table 2: Holdings of Liquid Assets, by Income Group, 1947-51

	Annual Income:							
	All	1 to 999	1,000 to 1,999	2,000 to 2,999	3,000 to 3,999	4,000 to 4,999	5,000 to 6,999	7,000 and up
Savings bond holdings	653.5	137.9	197.4	362.5	519.1	999.5	1,472.2	3,138.6
Other US bond holdings	140.0	14.5	42.5	49.6	23.1	158.8	102.3	1,339.0
Savings account balance	747.5	265.6	356.4	502.3	738.6	965.9	1,418.1	2,778.0
Checking account balance	353.1	74.1	114.7	148.3	217.1	368.5	501.7	2,560.5
Currency holdings	56.3	20.9	44.1	54.1	71.4	59.5	64.3	111.8
Savings bonds/all liquid assets	0.34	0.27	0.26	0.32	0.33	0.39	0.41	0.32

Source: Authors' calculations from the Survey of Consumer Finances (SCF), 1947-51. The year 1947 was the first year of the SCF. The total number of households included in the table is 16,119.

Table 3: E Bond Returns, 10-Year Holding Periods

Holding Period	Nominal Annual Return	Realized Real Annual Return
Dec '41 - Dec '51	2.900%	-2.478%
Jun '42 - Jun '52	2.900%	-2.004%
Dec '42 - Dec '52	2.900%	-1.711%
Jun '43 - Jun '53	2.900%	-1.397%
Dec '43 - Dec '53	2.900%	-1.461%
Jun '44 - Jun '54	2.900%	-1.402%
Dec '44 - Dec '54	2.900%	-1.210%
Jun '45 - Jun '55	2.900%	-1.052%
Dec '45 - Dec '55	2.900%	-1.021%

Notes: This table presents the annual nominal and real rate of return received by owners of E bonds, assuming they held their bonds to maturity, for different purchase dates. The nominal returns to holding E bonds were fixed at 2.9% if held for the full ten-year maturity; it was lower if held for shorter periods.

Table 4: Effect of E Bonds on Republicans' Vote Share in Presidential Elections, 1936-56

	(1)	(2)	(3)	(4)	(5)	(6)
Post-1944 x						
E Bond purchases per capita, 1944	14.346** (2.791)	16.582** (2.966)	15.532** (2.859)	18.338** (2.924)	16.315** (2.857)	15.769** (2.906)
Bank deposit inflows per cap, 1944	6.266** (2.024)	5.814** (2.025)	5.818** (1.937)	6.482** (1.956)	5.008** (1.880)	4.587* (1.925)
Bank deposits per capita, 1943	3.826** (0.665)	3.894** (0.669)	2.715** (0.651)	2.111** (0.647)	1.985** (0.640)	1.768** (0.638)
War spending per capita		-0.129* (0.060)	-0.334** (0.064)	-0.395** (0.065)	-0.382** (0.064)	-0.379** (0.065)
Median wage income			3.806** (0.391)	3.755** (0.543)	0.524 (0.619)	0.037 (0.650)
Share incomes top coded			-2.594 (1.593)	-3.358* (1.590)	-1.971 (1.546)	-1.948 (1.548)
Share Black				12.987** (1.067)	16.337** (1.136)	16.551** (1.152)
Adult population (000s)				-0.005** (0.002)	-0.003* (0.001)	-0.003* (0.002)
Share urban				0.017* (0.007)	-0.007 (0.007)	-0.013 (0.008)
Share agricultural workers					-14.457** (2.480)	-15.530** (2.622)
Share owner occupied housing					7.010** (1.443)	7.223** (1.462)
Share w/4 years college					82.165** (9.479)	74.835** (9.665)
Share of homes mortgaged						0.038** (0.013)
Constant	49.505** (0.297)	49.384** (0.303)	48.923** (0.308)	47.315** (0.325)	45.510** (1.085)	45.411** (1.100)
Observations	17,562	17,562	17,550	17,550	17,550	17,257
R-squared	0.964	0.964	0.965	0.966	0.967	0.967
County FE	YES	YES	YES	YES	YES	YES
State x Year FE	YES	YES	YES	YES	YES	YES

Notes: This table presents estimates of Equation (2), with the E bond subscription rate for 1944, along with various other controls, interacted with a post-1944 indicator in a panel of counties with the Republican vote share as the dependent variable and county and state-by-year fixed effects. In columns (1) through (5) the sample period is 1936-56; in column (6) the sample is shortened to 1944-52. Robust standard errors clustered by county are presented in parentheses; ** p<0.01, * p<0.05, + p<0.1

Table 5: Effect of E Bonds on Republicans' Vote Share in Presidential Elections, Alternative Samples

	(1)	(2)	(3)	(4)	(5)	(6)
	Baseline	Drop South	Drop Far West	Drop Northeast	Drop Small Counties	Long Panel 1928-68
Post-1944 x						
E Bond purchases per capita, 1944	15.769** (2.906)	14.898** (2.556)	17.147** (3.104)	17.459** (3.177)	15.379** (3.046)	9.001** (2.678)
Bank deposit inflows per cap, 1944	4.587* (1.925)	3.651* (1.756)	6.407** (2.054)	4.370* (1.987)	3.539+ (1.976)	5.919** (2.036)
Bank deposits per capita, 1943	1.768** (0.638)	0.539 (0.576)	2.424** (0.682)	1.717* (0.712)	1.844** (0.661)	2.006** (0.667)
War spending per capita	-0.379** (0.065)	-0.297** (0.062)	-0.383** (0.067)	-0.434** (0.069)	-0.373** (0.065)	-0.264** (0.066)
Median wage income	0.037 (0.650)	0.673 (0.650)	-0.249 (0.707)	0.129 (0.669)	-0.360 (0.671)	-2.505** (0.714)
Share incomes top coded	-1.948 (1.548)	-2.440 (1.533)	-2.494 (1.588)	-2.092 (1.580)	-1.724 (1.569)	1.448 (1.614)
Share Black	16.551** (1.152)	-10.720** (2.813)	14.693** (1.215)	16.658** (1.160)	16.764** (1.161)	17.146** (1.243)
Adult population (000s)	-0.003* (0.002)	-0.002 (0.001)	-0.004* (0.002)	-0.002+ (0.001)	-0.004* (0.002)	-0.004** (0.001)
Share urban	-0.013 (0.008)	0.002 (0.007)	-0.014+ (0.008)	-0.017* (0.008)	-0.009 (0.008)	-0.021** (0.008)
Share agricultural workers	-15.530** (2.622)	-5.561+ (2.942)	-16.352** (2.847)	-15.110** (2.704)	-16.694** (2.698)	-3.697 (2.533)
Share owner occupied housing	7.223** (1.462)	5.900** (1.703)	6.618** (1.571)	7.487** (1.495)	7.055** (1.484)	1.788 (1.577)
Share w/4 years college	74.835** (9.665)	56.273** (9.620)	71.090** (9.996)	83.234** (10.435)	68.697** (9.616)	60.239** (10.657)
Share of homes mortgaged	0.038** (0.013)	0.016 (0.013)	0.039** (0.013)	0.039** (0.013)	0.045** (0.013)	0.071** (0.013)
Constant	47.041** (1.148)	54.559** (1.375)	47.732** (1.208)	45.611** (1.169)	47.153** (1.206)	38.866** (1.165)
Observations	17,257	11,190	15,687	15,979	16,794	31,566
R-squared	0.967	0.956	0.967	0.966	0.967	0.928
County FE	YES	YES	YES	YES	YES	YES
State x Year FE	YES	YES	YES	YES	YES	YES

Notes: This table presents estimates of Equation (2), with the E bond subscription rate for 1944, along with various other controls, interacted with a post-1944 indicator in a panel of the counties with the Republican vote share as the dependent variable and county and state-by-year fixed effects. The regression in column (1) is the same as that of column (5) in Table 4, and in subsequent columns the sample is changed. In column (2), the South, defined as the states that seceded in the Civil War, is dropped; in column (3) the states of the 12th Federal Reserve district are dropped; in column (4), New England and NY, NJ and PA are dropped; in column (5) counties at or below the bottom 5% in adult population are dropped; and in column (6) the panel is expanded from 1936-56 to 1928-68. Robust standard errors clustered by county are presented in parentheses; ** p<0.01, * p<0.05, + p<0.1

Table 6: IV Regressions: Effect of E Bonds on Republicans' Vote Share in Presidential Elections, 1936-56

	(1) OLS	(2) IV-2SLS	(3) IV-2SLS	(4) IV-2SLS	(5) IV-2SLS
Post-1944 x					
E Bond purchases per capita, 1944	12.157** (3.319)	48.342* (18.776)	33.726* (16.574)	35.235* (16.605)	37.684* (17.850)
Bank deposit inflows per cap, 1944	3.174 (2.174)	0.017 (2.912)	0.500 (2.938)	-0.277 (2.805)	-1.220 (2.886)
Bank deposits per capita, 1943	2.278** (0.766)	-0.745 (1.716)	-0.901 (1.658)	-1.261 (1.532)	-1.442 (1.601)
War spending per capita	-0.214* (0.089)	-0.579** (0.207)	-0.471* (0.190)	-0.500* (0.196)	-0.536* (0.209)
Median wage income	3.846** (0.543)	3.564** (0.551)	2.907** (0.821)	0.680 (0.964)	-0.028 (1.013)
Share incomes top coded	-2.152 (1.805)	-0.776 (1.852)	-2.253 (2.000)	-1.435 (2.093)	-0.919 (2.146)
Share Black			11.501** (1.219)	14.651** (1.469)	14.581** (1.514)
Adult population (000s)			-0.002 (0.001)	-0.001 (0.001)	-0.001 (0.001)
Share urban			0.029* (0.011)	0.012 (0.012)	0.003 (0.013)
Share agricultural workers				-11.699** (3.373)	-13.247** (3.595)
Share owner occupied housing				6.882** (1.765)	6.720** (1.812)
Share w/4 years college				55.855** (15.745)	47.595** (16.499)
Share of homes mortgaged					0.050** (0.016)
Observations	8,285	8,285	8,285	8,285	8,189
R-squared	0.963	0.864	0.872	0.874	0.875
County FE	YES	YES	YES	YES	YES
State x Year FE	YES	YES	YES	YES	YES
Kleibergen-Paap F	--	13.52	14.40	13.23	12.83

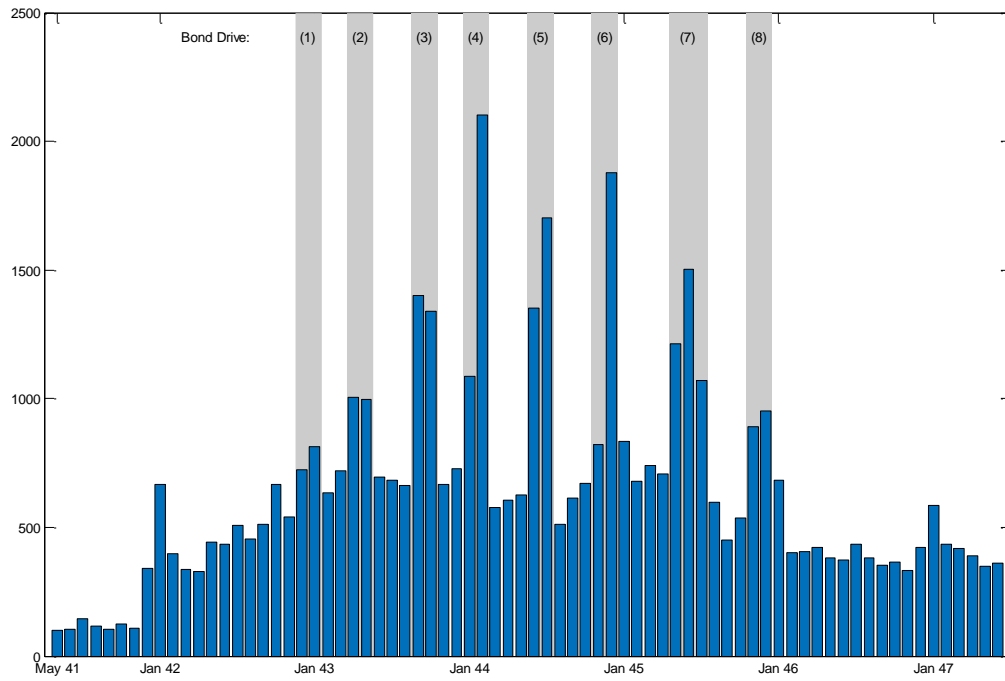
Notes: This table presents estimates of Equation (2), where we instrument for E bonds x post-1944 with the subscription rate for WWI liberty bonds x post-1944. The liberty bond data are available for 1,392 counties and are from Hilt and Rahn (2020). Columns (2), (3) and (4) have the same specifications as columns (3) (4) and (5) of Table 4, only estimated via 2SLS. The F statistics for the first stage are presented in the bottom row of the table. Robust standard errors clustered by county are presented in parentheses; ** p<0.01, * p<0.05, + p<0.1

Table 7: E Bonds, Ideology, and Electoral Outcomes

	(1)	(2)	(3)	(4) IV-2SLS
Post-1944 x				
E Bond purchases per capita, 1944	14.346** (2.791)	12.209** (2.658)	16.411** (3.016)	75.560+ (40.176)
Bank deposit inflows per cap, 1944	6.266** (2.024)	5.535** (2.055)	4.477* (1.956)	-6.463 (5.331)
Bank deposits per capita, 1943	3.826** (0.665)	3.910** (0.647)	1.547* (0.650)	-4.834 (3.617)
World War II volunteers per capita		1.384** (0.490)	1.331** (0.469)	-0.135 (1.014)
World War II medals per capita		0.448 (0.826)	-1.162 (0.798)	-0.400 (1.199)
War spending per capita			-0.385** (0.066)	-0.960* (0.457)
Median wage income			-0.035 (0.656)	-0.676 (1.355)
Share incomes top coded			-1.819 (1.550)	1.080 (3.124)
Share Black			17.385** (1.206)	16.172** (1.717)
Adult population (000s)			-0.003* (0.001)	-0.001 (0.001)
Share urban			-0.011 (0.008)	0.015 (0.020)
Share agricultural workers			-14.790** (2.654)	-15.861** (4.825)
Share owner occupied housing			7.582** (1.512)	9.319** (2.589)
Share w/4 years college			75.186** (9.750)	32.508 (24.456)
Share of homes mortgaged			0.037** (0.013)	0.072** (0.019)
Observations	17,562	17,436	17,137	8,087
R-squared	0.964	0.965	0.967	0.867
County FE	YES	YES	YES	YES
State x Year FE	YES	YES	YES	YES
Kleibergen-Papp F	--	--	--	7.53

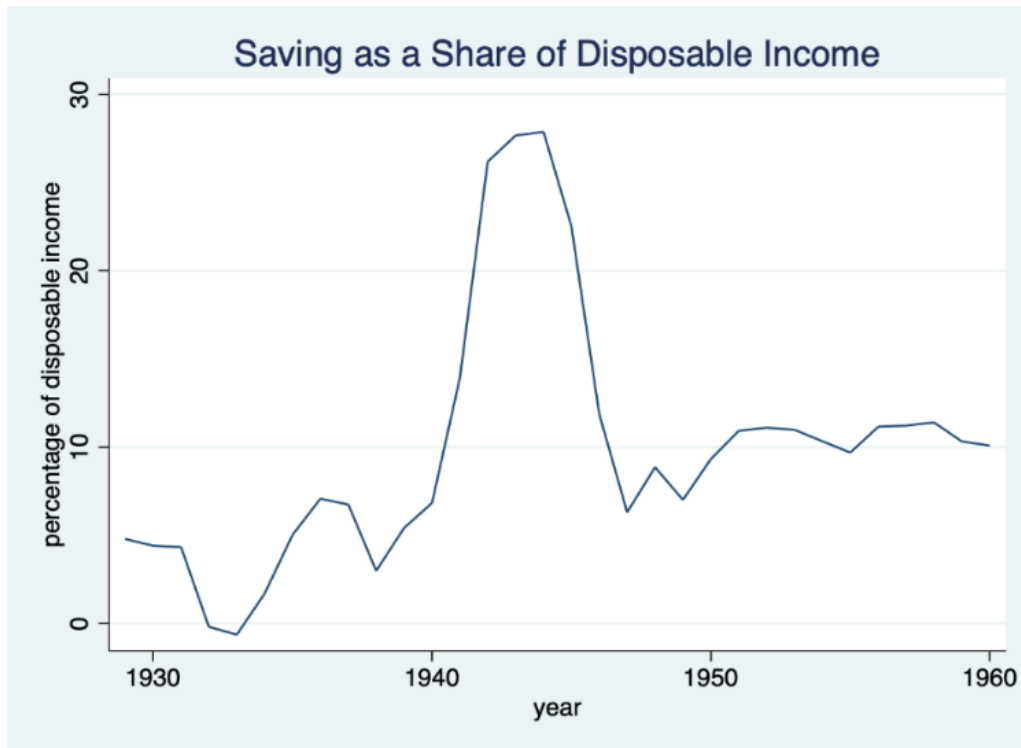
Notes: This table presents estimates of Equation (2), where we include measures of volunteers per capita and medals per capita from Caprettini and Voth (2023) as additional controls. The regression in column (3) includes all the same controls as that of column (6) of Table 4; the regression of column (4) includes all the same controls as that of column (5) of Table 6. Robust standard errors clustered by county are reported in parentheses; ** p<0.01, * p<0.05, + p<0.1

Figure 1: Monthly Sales of E Bonds, 1941-46



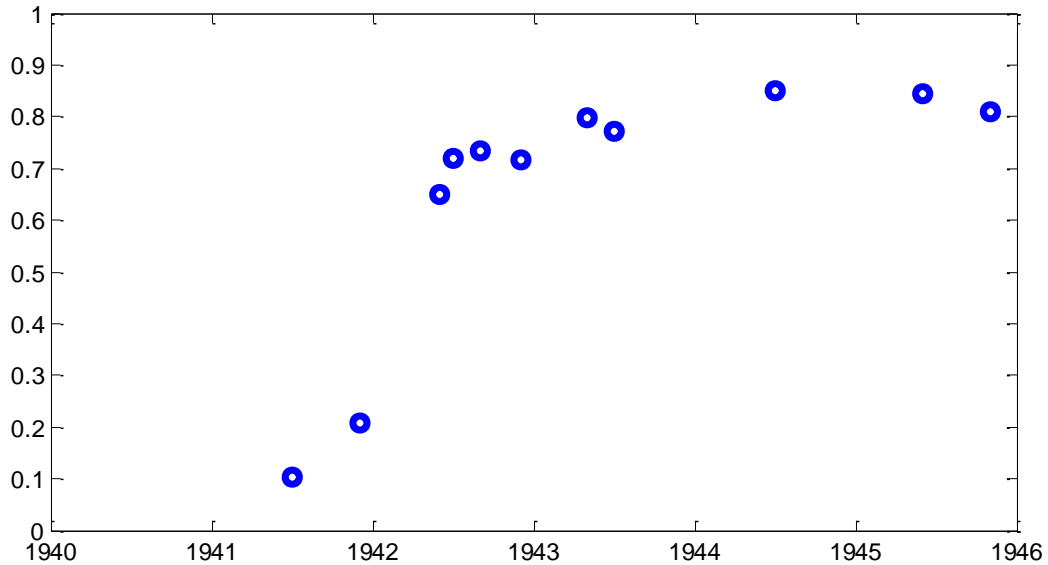
Notes: This figure presents monthly sales of E bonds from 1941 to 1946. The time periods of the eight bond drives are highlighted in grey. Source: *Annual Report of the Secretary of the Treasury*, various years.

Figure 2: Household Saving, 1929-60



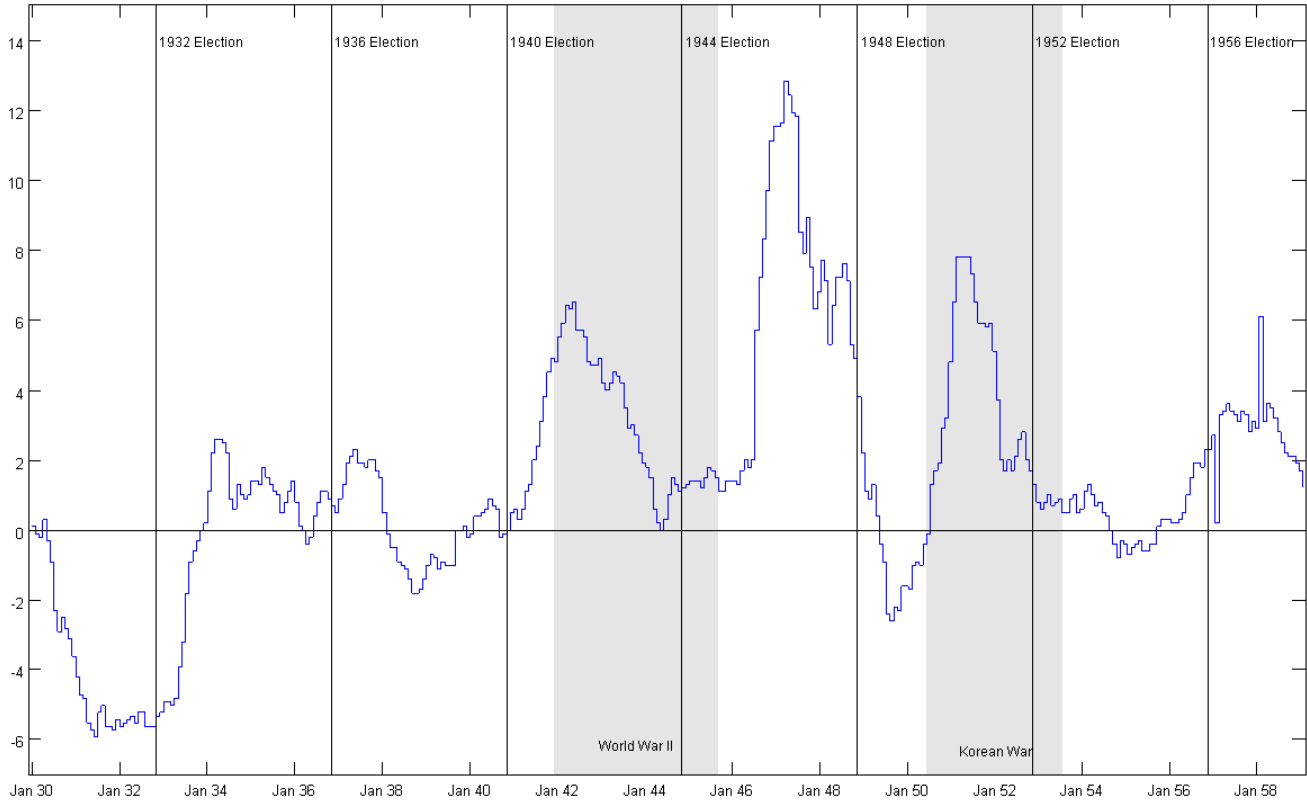
Source: Authors' calculations using data from Bureau of Economic Analysis.

Figure 3: Share of the Adult Population Reporting that they Owned War Savings Bonds



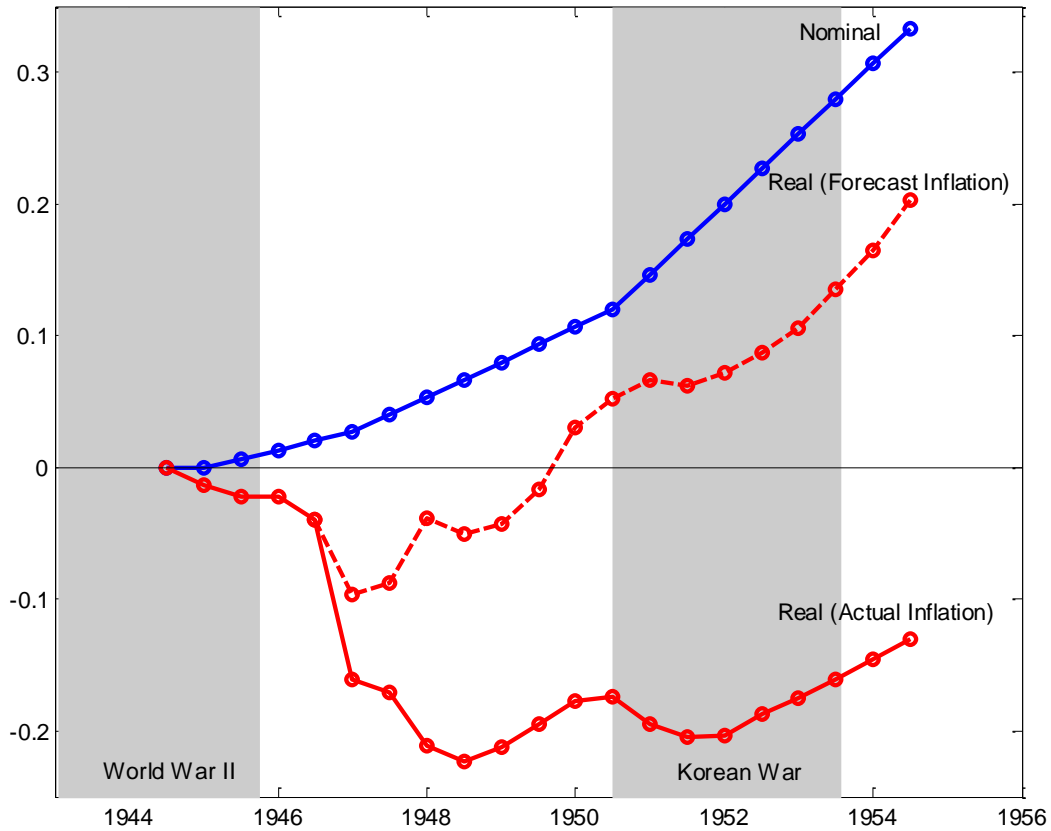
Notes: This figure presents the share of the adult population reporting that they owned war savings bonds, as reflected in responses to Gallup polls. Prior to the 1950s, Gallup used 'quota-controlled' samples; political scientists have developed weights that can be used to make the results nationally representative (see Caughey et al., 2020). All polls that ask the question "Have you bought any War Bonds as yet?" (or a similarly worded question) for which weights are available are included in the figure. The data points in the figure are calculated using the 'WtPubComp' weights, which produce results that are comparable across years. Sample sizes typically range from 2,700 to 3,000. *Source:* Authors' calculations from Gallup polls 1941-0239, 1941-0251, 1942-0267, 1942-0270, 1942-0273, 1942-0282, 1942-0293, 1943-0296, 1944-0321, 1945-0344, and 1945-0357, accessed via the Roper Center's ipoll website (<https://ropercenter.cornell.edu/ipoll/>).

Figure 4: Monthly CPI Inflation Rates and Presidential Elections, 1930-1960



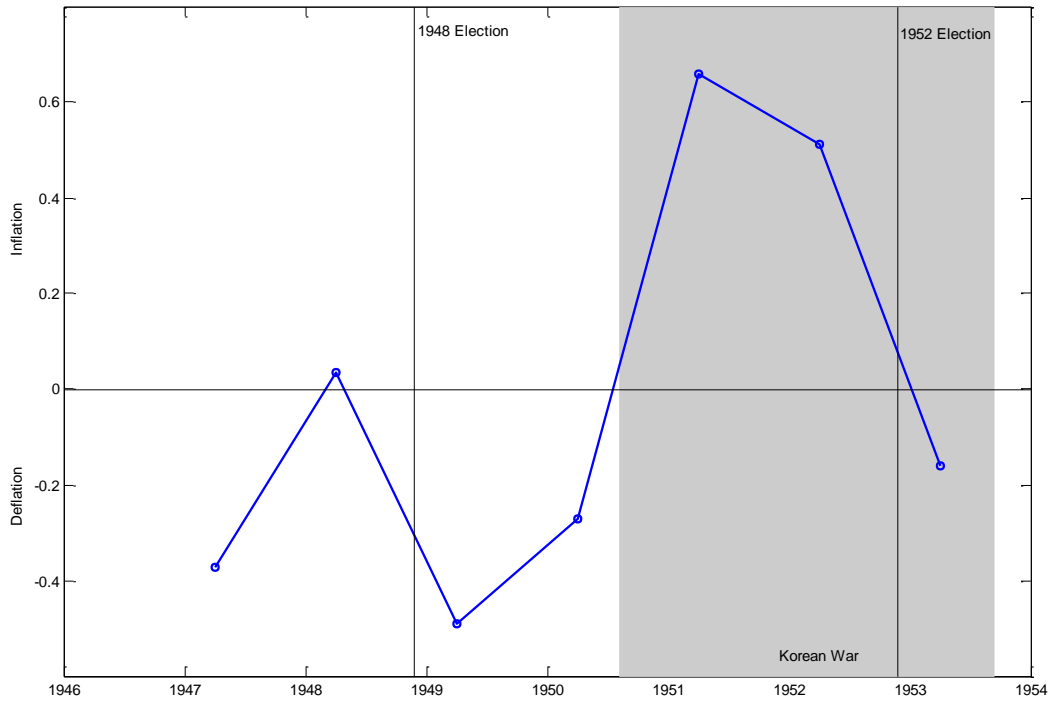
Notes: This figure presents monthly inflation rates from 1930 to 1960, as measured using the CPI, and calculated as the percentage change from the previous year. The months of presidential elections are marked with a vertical line. The time periods of WWII and the Korean War are highlighted in grey. *Source:* FRED series M04128USM350NNBR.

Figure 5: Cumulative Nominal and Real Returns for an E Bond Purchased in June 1944



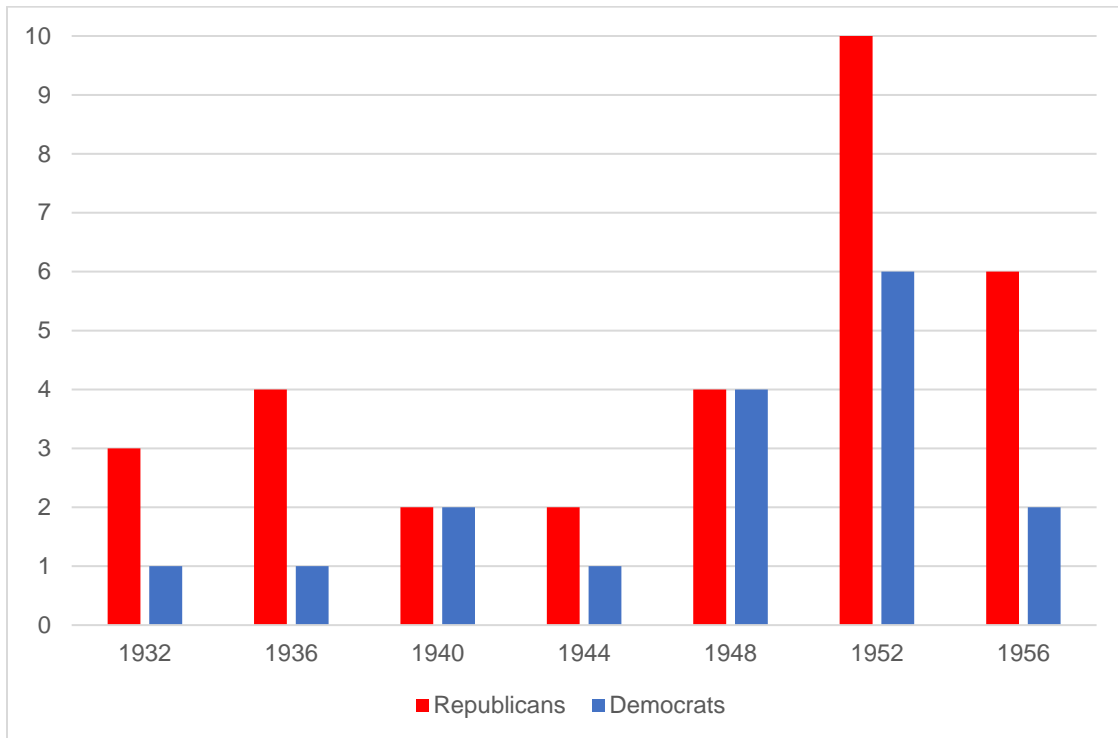
Notes: This figure presents the cumulative nominal and real returns to owning an E bond that was purchased in June 1944; the series show the cumulative returns received if held to the date marked on the horizontal axis and redeemed. Nominal returns are calculated from the redemption schedule for E bonds which lists redemption values for 6-month holding periods. Real returns are calculated using inflation rates from the CPI. The dashed line shows real returns calculated using six-month inflation forecasts based on the Livingston Survey, which begins in mid-1946.

Figure 6: Household Inflation Expectations, 1947-1953



Notes: This figure presents the margin by which inflation or deflation was expected by respondents to the Survey of Consumer Finances (SCF) in the survey years 1947-53. Each data point is calculated as the difference between the share of survey respondents expecting inflation and the share of respondents expecting deflation; negative values correspond to a greater fraction expecting deflation than inflation. The error bars show two times the standard error of the difference in each direction. The SCF was administered in the first quarter of the year.

Figure 7: Mentions of Inflation in Major Party Platforms, 1932-56



Notes: This figure presents counts of sentences that mention inflation in the Republicans' and Democrats' party platforms from 1932 to 1956. Terms that have meanings that are closely related to inflation are counted; these include, for example, "cost of living," "honest dollar," "rising prices," "integrity of the currency," "high prices," "sound currency," and "value of the dollar," among others.

Figure 8a: E Bond Subscriptions Per Capita, 1944

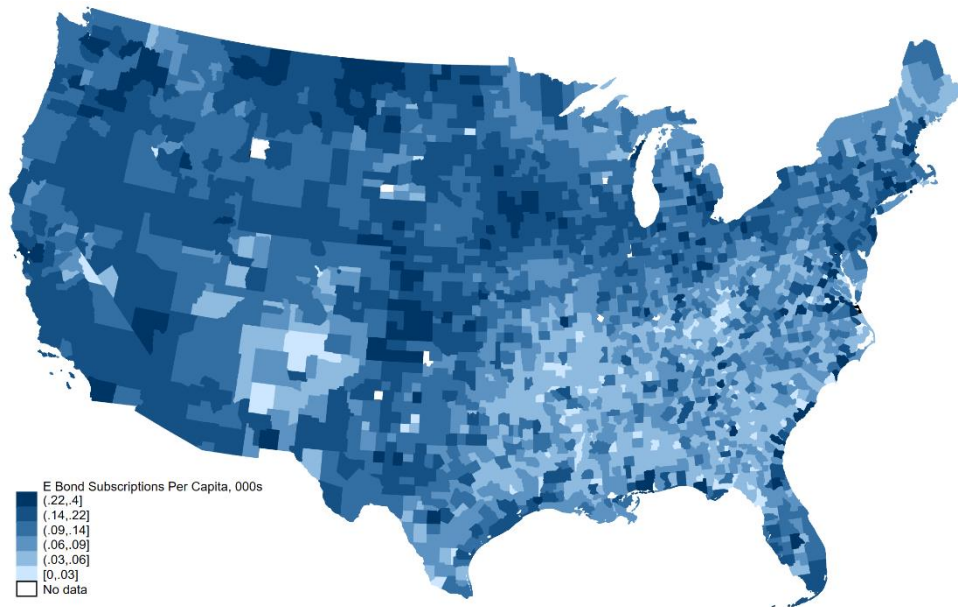
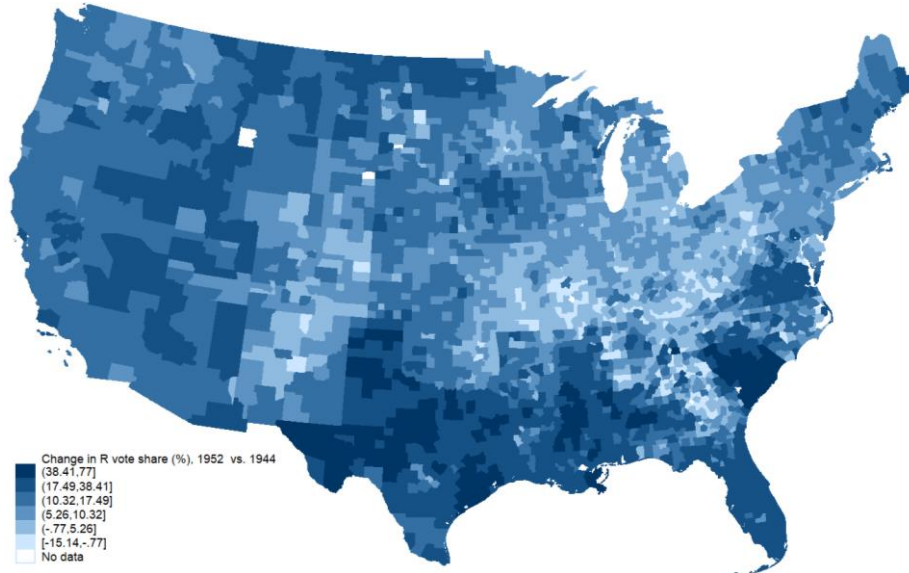
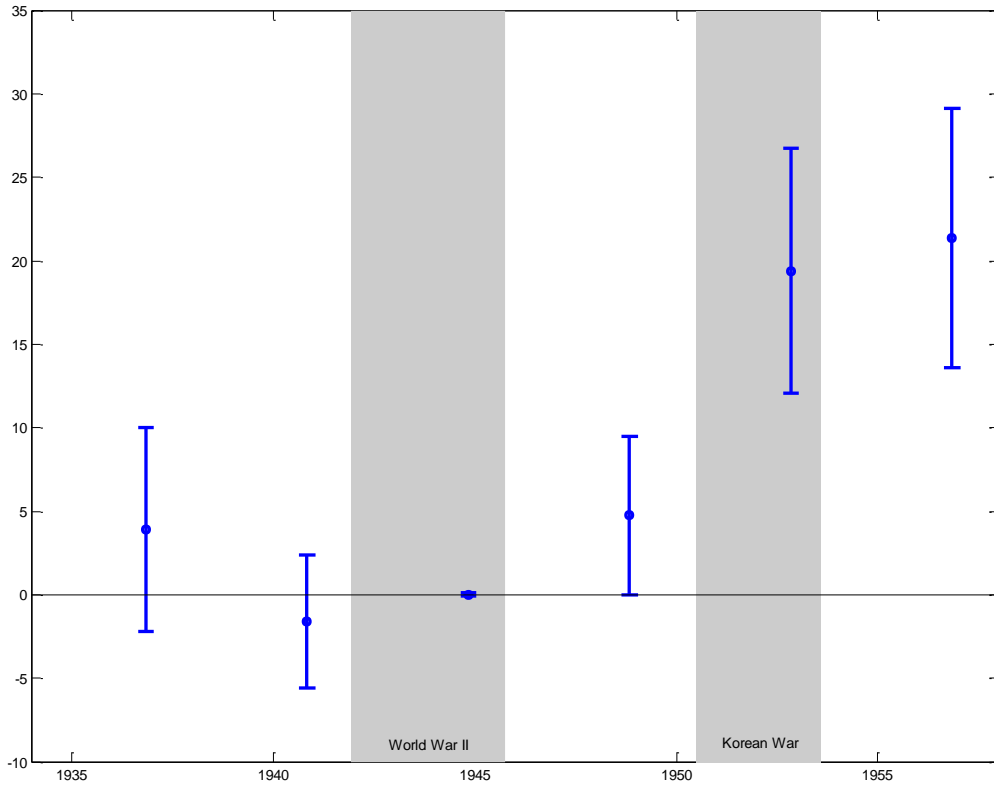


Figure 8b: Change in Republicans' Vote Share in Presidential Elections, 1952 vs. 1944



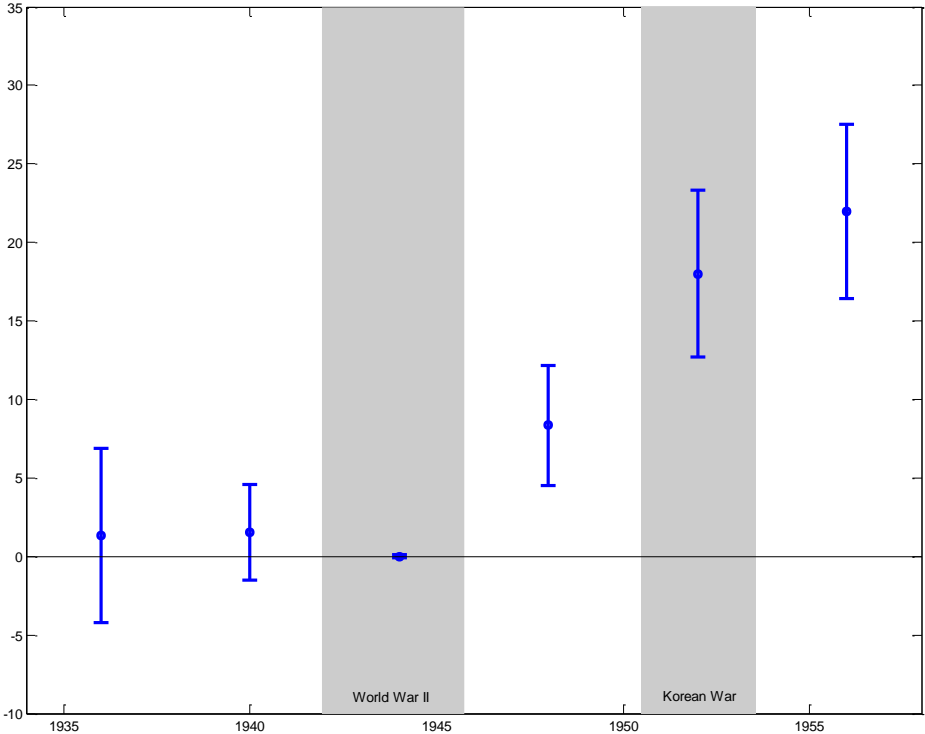
Notes: This figure presents choropleth maps of 1940 counties shaded by E bond subscriptions per adult capita (8a, top) and the change in the Republican Party presidential vote share from 1944 to 52, (8b, bottom).

Figure 9: Effect of 1944 E Bond Subscriptions on the Republicans' Vote Share in Presidential Elections, 1936-56



Notes: This figure presents estimates of Equation (1), in which the Republican vote share in presidential elections is regressed on E bond subscriptions x election year interactions, in a panel model with county and state-by-election year fixed effects, and the 1944 interaction excluded. We also include 1944 bank deposit inflows and 1943 total deposits, also interacted with election years. The error bars depict two standard errors (which account for clustering by county) in either direction. The periods of World War II and the Korean War are highlighted in grey.

Figure 10: Effect of Liberty Bond Subscriptions on the Republicans' Vote Share in Presidential Elections, 1936-56



Notes: This figure presents the reduced-form relationship between our instrument, the liberty bond subscription rates from WWI, and the Republican vote share. To test whether the liberty bond subscription rates produced a general preference for Republicans in all sample elections, we interact liberty bond subscriptions with election year interactions, in a panel model with county and state-by-election year fixed effects, and the 1944 interaction excluded. The error bars depict two standard errors (which account for clustering by county) in either direction. The periods of World War II and the Korean War are highlighted in grey.

Appendix: Additional Figures and Tables

Table A1: Corrections to Republican Vote Share in Clubb et al. (1980)

State	Year	Correction to Republican Vote Share
Mississippi	1936	Added V524 ("Other") - Electors pledged to Landon
	1940	Added V549 ("Other") - Electors pledged to Wilkie
	1944	Added V570 ("Other") - Electors pledged to Dewey
	1952	Added county-level votes for Republican-pledged electors from Mississippi (1960)
	1956	Added county-level votes for Republican-pledged electors from Mississippi (1960)
Georgia	1944	Added V570 ("Other") - "Independent Democratic" electors pledged to Dewey
South Carolina	1952	Added V606 ("Other") - "Independents for Eisenhower"

Notes: This table presents the corrections made to the Republican vote share variable from Clubb et al. (1980) (ICSPSR 08611) for this paper. In many Southern states, electors pledged to the Republican candidate appeared on the ballot as independents, rather than Republicans. The Clubb et al. dataset focuses on party affiliations rather than candidates; Independent electors pledged to a Republican candidate are generally coded as "Other" rather than "Republican" in the dataset. As a result, the Republican vote share is 0 in the dataset in states where the Republican candidate attracted a substantial share of the vote (eg, Mississippi in 1952 and 1956). We checked all cases where more than 1% of votes were for Other. When votes for Other or for Republicans plus Other equaled the total votes cast for the Republican candidate in the state, we add the votes for Other, as listed above. In the state of Mississippi in 1952 and 1956, all slates of electors on the ballot were technically Independents, meaning that the votes for Other account for more than 97 percent of the vote and the vote shares for both Democrats and Republicans are 0. To identify the votes for Eisenhower in those elections in that state, we use the official report of the Mississippi Secretary of State (Mississippi, 1960).

Table A2: Summary Statistics, Main Variables

	Mean	SD	25th pctile	50th pctile	75th pctile
Republican vote share, 1944, in percentage points	42.3	20.4	25.5	46.9	58.3
E bond purchases per adult, 1944, in 000s	0.107	0.062	0.062	0.094	0.138
Bank deposit inflows per adult, 1944, in 000s	0.115	0.069	0.070	0.103	0.145
Bank deposit balances per adult, 1943, in 000s	0.488	0.286	0.275	0.443	0.639
War spending per adult	0.775	1.832	0.000	0.030	0.607
Median wage income, 1940, in 000s	0.383	0.356	0.102	0.290	0.572
Share of incomes top coded by census, 1940	0.057	0.063	0.012	0.031	0.081
Share of the population that is Black, 1940	0.106	0.176	0.001	0.013	0.132
Share of the population that is agricultural workers, 1940	0.179	0.093	0.105	0.184	0.250
Share owner occupied housing, 1940	0.499	0.114	0.434	0.509	0.574
Adult population, 1940, in 000s	26.4	91.5	6.5	11.2	19.9
Share urban, 1940, in percentage points	23.2	24.4	0.0	19.0	39.0
Share age 25+ with four years of college	0.03	0.015	0.022	0.029	0.040
Share owner-occupied homes that are mortgaged, in %	26.9	12.2	18.2	25.3	34.1
Liberty bond participation rate	0.168	0.104	0.073	0.166	0.244

Notes: This table presents summary statistics for our main variables, most of which are available for 2,949 counties. The mortgage variable, however, is available for 2,900 counties, and the liberty bond variable is available for 1,393 counties. All variables are winsorized at the top and bottom 1% to reduce the influence of outliers. The sources from which these variables were obtained are described in the text.

Table A3: First-Stage Results, IV Estimation

	First-Stage Estimates:			
	(1)	(2)	(3)	(4)
Post-1944 x				
Liberty bond participation rate	0.120** (0.033)	0.124** (0.033)	0.120** (0.033)	0.118** (0.033)
Bank deposit inflows per cap, 1944	0.090** (0.023)	0.109** (0.023)	0.098** (0.022)	0.094** (0.023)
Bank deposits per capita, 1943	0.076** (0.009)	0.087** (0.010)	0.079** (0.010)	0.079** (0.010)
War spending per capita	0.010** (0.001)	0.010** (0.001)	0.011** (0.001)	0.011** (0.001)
Median wage income	-0.002 (0.005)	0.019** (0.006)	0.024** (0.008)	0.024** (0.008)
Share incomes top coded	-0.030* (0.013)	-0.049* (0.013)	-0.058** (0.014)	-0.058** (0.014)
Share Black		0.002 (0.010)	-0.017 (0.013)	-0.015 (0.013)
Adult population		-0.00001 (0.00001)	-0.00001+ (0.00001)	-0.00002+ (0.00001)
Share urban		-0.0005** (0.00008)	-0.0005** (0.00008)	-0.0005** (0.00009)
Share agricultural workers			0.079** (0.028)	0.073** (0.028)
Share owner occupied housing			-0.027+ (0.016)	-0.024 (0.016)
Share w/4 years college			0.438** (0.137)	0.428** (0.136)
Share of homes mortgaged				0.0002 (0.0002)
Observations	8,285	8,285	8,285	8,189
Kleibergen-Paap F	13.52	14.40	13.23	12.83
County FE	YES	YES	YES	YES
State x Year FE	YES	YES	YES	YES

Notes: This table presents the first-stage from the 2SLS estimation of Equation (2), where we instrument for E bonds x post-1944 with the subscription rate for WWI liberty bonds x post-1944. Columns (1), through (4) correspond to columns (2) through (5) of Table 6. The F statistics for the first stage are presented in the bottom row of the table. Robust standard errors clustered by county are presented in parentheses; ** p<0.01, * p<0.05, + p<0.1

**Table A4: Falsification Test:
The Effect of Liberty Bond Participation on 1944 Bank Account Inflows**

	(1)	(2)	(3)	(4)	(5)	(6)
Post-1944 x						
Liberty Bond participation rates	-0.011 (0.030)	-0.012 (0.029)	-0.018 (0.031)	-0.021 (0.030)	-0.023 (0.030)	-0.022 (0.030)
Bank deposits per capita, 1943	0.152** (0.014)	0.152** (0.015)	0.151** (0.015)	0.135** (0.017)	0.126** (0.018)	0.124** (0.018)
War spending per capita		0.000 (0.001)	0.000 (0.001)	-0.000 (0.001)	-0.000 (0.001)	-0.000 (0.001)
Median wage income			0.005 (0.009)	-0.022+ (0.011)	-0.020 (0.013)	-0.028* (0.013)
Share incomes top coded			0.008 (0.025)	0.034 (0.026)	0.023 (0.026)	0.027 (0.027)
Share Black				-0.018 (0.012)	-0.029* (0.013)	-0.031* (0.013)
Adult population (000s)				-0.00003 (0.00003)	-0.00003 (0.00003)	-0.00003 (0.00003)
Share urban				0.0006** (0.0001)	0.0006** (0.0002)	0.0005** (0.0002)
Share agricultural workers					0.064 (0.041)	0.043 (0.042)
Share owner occupied housing					-0.004 (0.017)	-0.006 (0.018)
Share w/4 years college					0.528* (0.216)	0.427+ (0.219)
Share of homes mortgaged						0.001** (0.000)
Constant	0.043** (0.006)	0.043** (0.006)	0.042** (0.006)	0.048** (0.007)	0.027+ (0.015)	0.024 (0.015)
R-squared	8,358	8,358	8,352	8,352	8,352	8,256
County FE	0.883	0.883	0.883	0.887	0.888	0.889
State x Year FE	YES	YES	YES	YES	YES	YES
State x Year FE	YES	YES	YES	YES	YES	YES

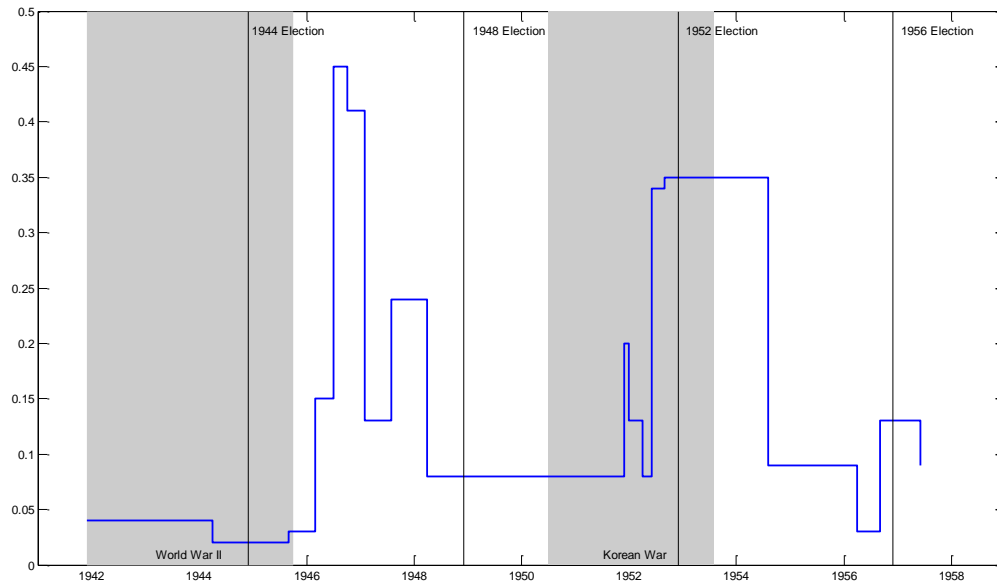
Notes: This table presents results of a falsification test, estimating the relationship between liberty bond participation rates and 1944 bank account inflows. A positive relationship would indicate that liberty bonds predicted forms of saving that were not the product of broad local efforts to elicit participation. The estimated relationships are of the same structure as the first-stage from the IV to facilitate comparisons, but the purely cross-sectional relationship is essentially the same. Robust standard errors clustered by county are presented in parentheses; ** p<0.01, * p<0.05, + p<0.1

Table A5: Effect of E Bonds on Republicans' Vote Share in Congressional Elections, 1934-58

	(1)	(2)	(3)	(4)	(5)	(6)
Post-1944 x						
E Bond purchases per capita, 1944	11.279** (3.248)	15.646** (3.563)	15.974** (3.579)	15.618** (3.672)	14.251** (3.646)	15.883** (3.694)
Bank deposit inflows per cap, 1944	10.863** (2.706)	9.757** (2.724)	9.849** (2.719)	9.468** (2.775)	7.771** (2.743)	7.293** (2.722)
Bank deposits per capita, 1943	0.895 (0.831)	1.140 (0.831)	1.207 (0.835)	1.585+ (0.876)	0.957 (0.853)	0.869 (0.862)
War spending per capita		-0.289** (0.082)	-0.264** (0.085)	-0.249** (0.086)	-0.236** (0.086)	-0.247** (0.087)
Median wage income			-0.369 (0.541)	-0.167 (0.708)	-0.370 (0.802)	-0.779 (0.862)
Share incomes top coded			4.557+ (2.336)	4.389+ (2.388)	3.264 (2.380)	4.100+ (2.384)
Share Black				-2.256 (1.454)	-2.242 (1.567)	-2.311 (1.591)
Adult population				-0.000+ (0.000)	-0.000 (0.000)	-0.000 (0.000)
Share urban				-0.001 (0.009)	-0.002 (0.010)	-0.003 (0.010)
Share agricultural workers					5.051 (3.386)	3.183 (3.385)
Share owner occupied housing					4.359* (2.040)	3.918+ (2.062)
Share w/4 years college					72.035** (12.335)	72.669** (12.506)
Share of homes mortgaged						0.003 (0.017)
Constant	40.322** (0.404)	40.057** (0.414)	39.854** (0.450)	39.850** (0.461)	35.106** (1.394)	35.636** (1.400)
Observations	28,329	28,329	28,303	28,303	28,303	27,953
R-squared	0.920	0.920	0.920	0.920	0.920	0.921
County FE	YES	YES	YES	YES	YES	YES
State x Year FE	YES	YES	YES	YES	YES	YES

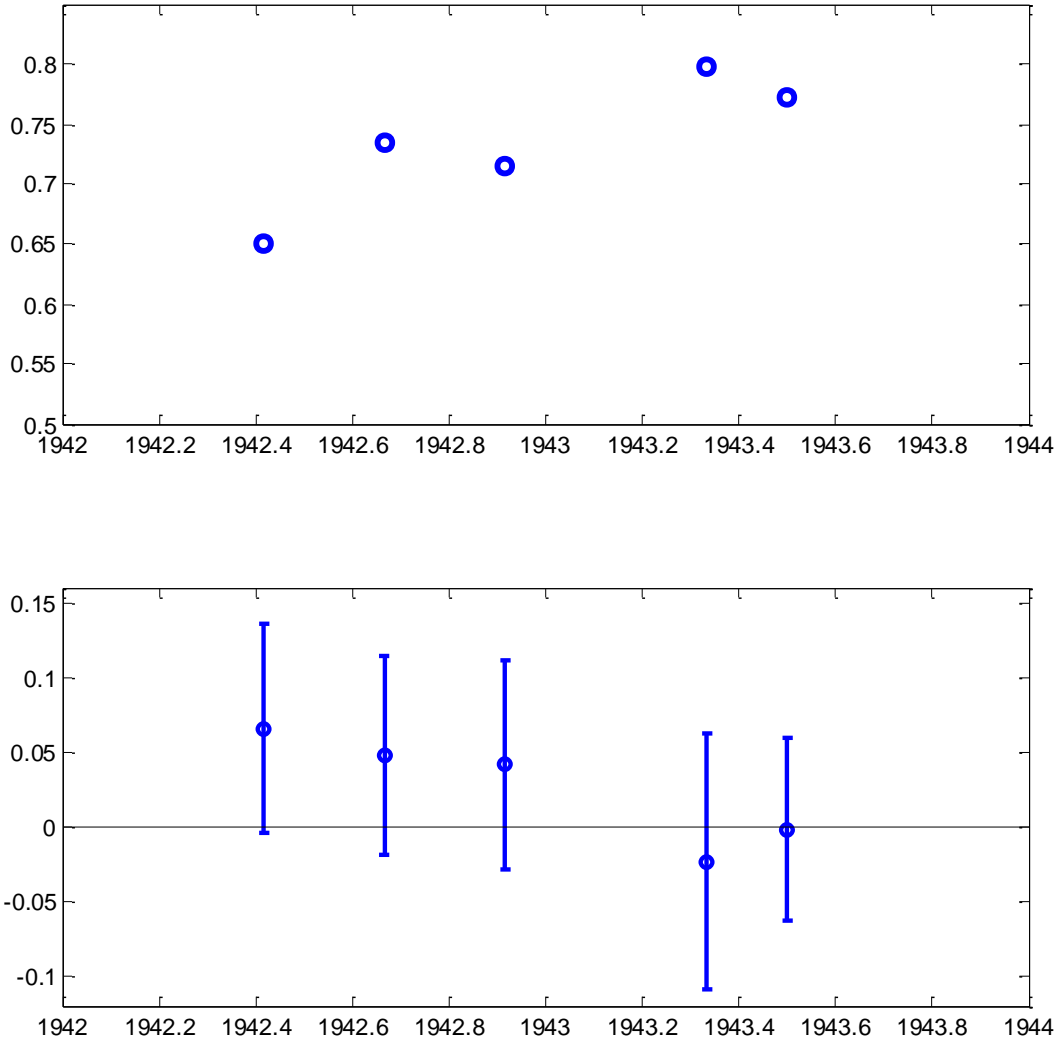
Notes: This table presents the same regressions as Table 4, but using congressional elections from 1934-58, rather than presidential elections from 1936-56. Each column presents estimates of Equation (2), with the E bond subscription rate for 1944, along with various other controls, interacted with a post-1944 indicator in a panel of counties with the Republican vote share as the dependent variable and county and state-by-year fixed effects. Robust standard errors clustered by county are presented in parentheses; ** p<0.01, * p<0.05, + p<0.1

Figure A1: Share of Opinion Poll Respondents Naming Inflation as One of the Most Important Problems Facing the Country



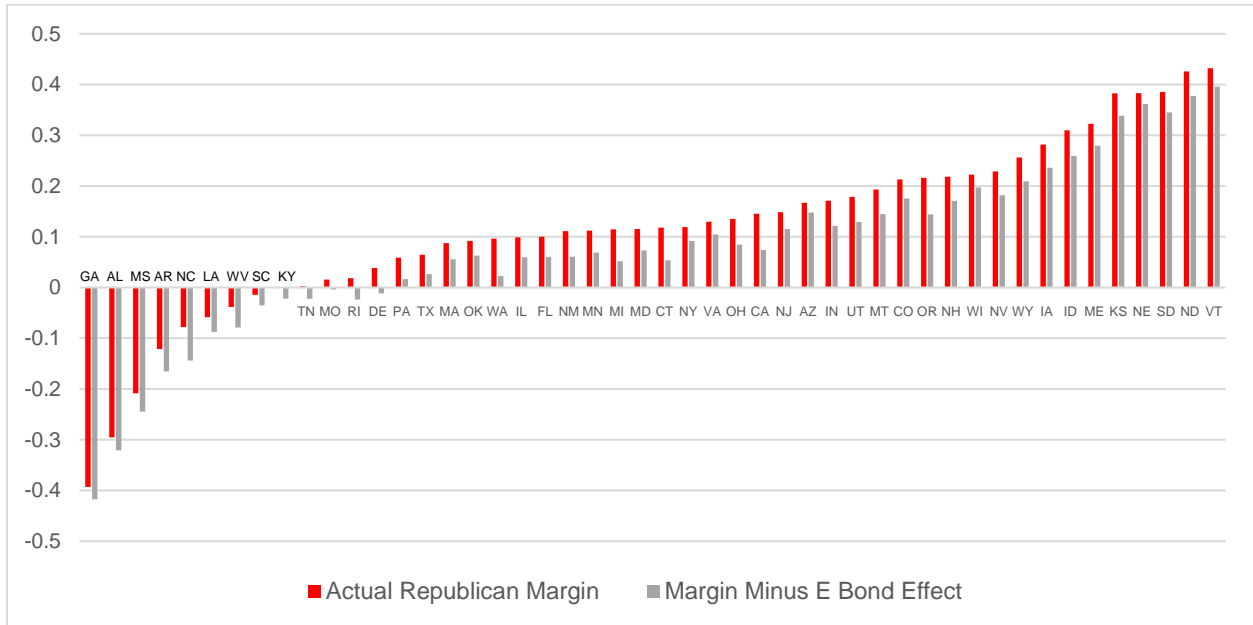
Notes: The figure shows the share of opinion poll respondents answering “inflation” or synonyms for inflation in response to the question, “What do you think is the most important issue before the country today?” or “In your opinion, what are the two or three most important problems facing the whole country today?” or a similarly worded question. Several additional opinion polls asked this question, but the polling firm grouped together responses relating to a broad range of economic issues, such as inflation, taxation, or the likelihood of an economic downturn, into a single response category; those polls are excluded from the figure. *Source:* Authors’ calculations from Gallup polls 1941-0252, 1944-0313, 1945-0354, 1946-0366, 1946-0374, 1946-0378, 1946-0401, 1948-0415, 1952-0489, 1956-0561, and 1957-0583; Opinion Research Council polls of December 1951, July 1954, July 1955, August 1956, and January 1957; and Roper polls 074, 059, and 060, accessed via the Roper Center’s ipoll website (<https://ropercenter.cornell.edu/ipoll/>).

Figure A2 Share of Adult Population Owning Liberty Bonds and Differential Rates of Support for Republicans Among Liberty Bond Owners, 1942-43



Notes: The top panel of the figure shows the percent of the adult population that reported owning E bonds, from the subset of Gallup polls for which political preference questions were asked. The bottom panel shows the differences, in the same polls, in the support for Republicans among E bond owners compared to survey respondents who did not own E bonds, as estimated from linear regressions with robust standard errors. The questions typically take the form “Leaving the question of candidates aside if the Presidential election were being held today, which party would you vote for?” or “If you were voting for Congressman today, would you be most likely to vote for the Democratic candidate, or the Republican candidate?” As the bond drives spread bond ownership to a greater share of the population, the political preferences of E bond owners became indistinguishable from those of the rest of the population. *Source:* Authors’ calculations from Gallup polls 1942-0267, 1942-0273, 1942-0282, 1942-0293, and 1943-0296, accessed via the Roper Center’s ipoll website (<https://ropercenter.cornell.edu/ipoll/>).

Figure A3: Actual and Adjusted Republican Electoral Margins by State, 1952 Presidential Election



Notes: This figure presents, in red, the actual Republican margin of victory in each state in the 1952 presidential election, and in gray, counterfactual Republican margins of victory with the estimated effect of E bonds removed, under assumptions intended to capture an upper-bound effect of E bonds. The Republicans won 39 out of 48 states and 442 out of 531 electoral votes in that year. To calculate the counterfactual vote shares, we first estimate Equation (2) using population-weighted state-level data for E bonds and Republican votes with region-by-year fixed effects for 1936-56. We then subtract from each state's actual Republican margin the estimated effect of E bonds (δ) multiplied by that state's 1944 E bond sales per capita. We thus set each state's E bond purchases to 0, and assume there were no changes in other financial holdings such as bank accounts, which would have had offsetting (but smaller) political effects. The Republicans won few states by narrow margins; removing the E bond effect from their margin of victory under these assumptions would have caused them to lose only Tennessee, Missouri, Rhode Island and Delaware, which in total had 31 electoral votes.