Did Ending the Military Draft Reduce U.S. Voter Participation? An Exploratory Investigation

Richard J. Cebula\textsuperscript{a}, Franklin G. Mixon, Jr.\textsuperscript{b}, and Addison Layfield\textsuperscript{c}

\textsuperscript{a}Jacksonville University, \textsuperscript{b}Columbus State University, and \textsuperscript{c}Armstrong Atlantic State University

Abstract This exploratory study examines the impact of ending the military draft on U.S. voter turnout from 1960 through 2006. After allowing for a number of variables, including the unemployment rate, unionization, the female labor force participation rate, per capita real GDP, and Presidential approval ratings, compelling evidence is found that ending the military draft in the U.S. may have acted in and of itself to reduce the aggregate voter participation rate. Specifically, the end of military conscription may have reduced voter turnout by about 7.5 percentage points, \textit{ceteris paribus}.

Keywords: voter turnout; rational ignorance; military conscription

\textit{JEL Classification:} D72

1. Introduction

The subject of voter participation at in the U.S. has been examined extensively by economists and political scientists. Academic investigation into voter participation in the U.S. (and elsewhere) has historically focused on the marginal benefits and marginal costs of voting, and whether the decision to vote is a rational one. Beginning with Downs’ (1957) theory of the “rational voter” (i.e., the Rational Voter Model, or RVM), a number of RVM studies have followed, many of which have been presented in a variety of “real world” or “experimental” contexts.\textsuperscript{1} In recent years, Copeland and Laband (2002), Barreto, Segura, and Woods (2004), and Cebula (2004) have empirically investigated a theory of “expressive voting.” To some extent, these studies reflect efforts to identify non-traditional or non-demographic variables that may explain voting behavior.

This study is an exploratory effort seeking quantify the effect of an overlooked factor that may influence voter participation in U.S. national elections, namely, the presence of a military draft, and its influence on the electoral participation of citizens. Our data set of U.S. national elections spans from 1960 to 2006, including a time-frame (1960-1972) wherein military conscription existed in the U.S., as well as a time-frame (1974-2006) where an all-volunteer army was employed. The finding in this exploratory study is that the existence of a military draft leads to a higher voter participation rate; alternatively stated, ending the military draft reduced the aggregate voter participation rate.
2. Framing the Hypotheses

Paralleling in principle the RVM, the probability that a given eligible voter will actually vote, PROBV, is an increasing function of the expected gross benefits (EGB) associated with voting, ceteris paribus, and a decreasing function of the expected gross costs (EGC) associated with voting, ceteris paribus. In interpreting EGB, this exploratory study argues that the concept requires a very broad interpretation. For example, the marginal benefit of voting in most major elections for the individual in is often expressed terms of the probability of casting a decisive vote, which is approximately zero. Nevertheless, certain circumstances or factors can potentially increase the expected benefits from voting. The variables in (1) below explore factors intended to capture changes in the expected benefits from voting in U.S. national elections (1960-2006).

\[ VPR_t = f(ELECTDUM_t, UNEMPRATE_t, UNION_t, FLFPR_t, PCRGDP_t, PRESAPPDUMMY_t, IRAQWAR_t, ARMYRECRUITTS%, DRAFTDUMMY_t) \]  \tag{1} \]

VPR\(_t\) is the percentage of eligible voters who actually voted in the national elections in year \(t\); ELECTDUM\(_t\) is a dummy variable equal to 1 if year \(t\) was a U.S. Presidential election year (0 otherwise); UNEMPRATE\(_t\) is the percentage of U.S. civilians that were unemployed in year \(t\); UNION\(_t\) is the percentage of the U.S. civilian labor force that was unionized in year \(t\). Next, FLFPR\(_t\) is the female labor force participation rate in year \(t\), expressed as a percent; PCRGDP\(_t\) is the per capita GDP in year \(t\) (expressed in year 2000 dollars); PRESAPPDUMMY\(_t\) is a binary variable equal to 1 in those election years when the average Presidential approval rating was more than one full standard deviation above or one standard deviation below the average Presidential approval level for the 1960-2006 period. In addition to these, IRAQWAR\(_t\) is a dummy variable equal to 1 if year \(t\) is part of time period during which the U.S.-Iraq War was occurring (0 otherwise). ARMYRECRUITTS\(_t\) is the percentage of the eligible U.S. population that voluntarily enlisted in the U.S. Army and U.S. Army Reserves in year \(t\); and, finally, DRAFTDUMMY\(_t\) is a binary variable equal to 1 for those election years during which the military draft was no longer in effect (1974-2006).

Presidential elections offer an opportunity for individual eligible voters to vote for a very powerful and important policymaker (the President) in conjunction with voting for myriad other candidates for public office and on a potential host of referenda. Hence, during Presidential election years (as opposed to non-Presidential, or mid-term election years), there may exist an increased incentive to vote. Moreover, the prospect of voting in such an important election also tends to invoke greater emotional enthusiasm and psychic benefits from fulfilling one’s “civic duty” that are typically missing in most other election years (Copeland and Laband, 2002; Cebula, Durden and Gaynor, 2008). Consequently, it is hypothesized that the voter participation rate is higher during Presidential election years than during mid-term election years, ceteris paribus.

Feddersen (2004; 107) argues that individual voters base their decision to participate in a given election in part on “…assessments about the overall macroeconomic health of the economy.” Thus, it is expected that UNEMPRATE\(_t\) will be positively related to VPR\(_t\). Unions have been successful historically in mobilizing their memberships to participate in national elections, not only in the U.S. but in other democracies. Hence, it is expected that the higher (lower) the relative degree of union membership in the aggregate, the greater (lower) the aggregate voter participation rate.
The female labor force participation rate (FLFPR) is an economic factor that may influence the expected benefits from voting. Arguably, as the FLFPR rises, women in the labor force may become more directly affected by, more informed about, and more sensitive to a host of labor market and other economic issues. As such, women in the labor force may perceive a greater need to act on behalf of their own interests by participating in the election process. Hence, it is hypothesized that the higher the FLFPR, the higher the overall VPR, ceteris paribus. Another economic factor that may influence the expected benefits from voting is per capita real GDP (PCRGDP). Tolbert and Smith (2005) indicate that persons with higher incomes per capita are considered more likely to participate in the electoral process. Thus, it is hypothesized here that the higher the per capita real GDP, the higher the VPR, ceteris paribus.

It is hypothesized in this study that the public has a greater incentive to vote when eligible voters are especially pleased or especially displeased in their perception of the incumbent President’s job performance. To measure whether the public is especially pleased or displeased with the President, the binary variable PRESAPP/DIS is introduced. The variable PRESAPP/DIS is equal to 1 during those years when the President’s average public approval rating is either very low, defined in this study as the mean Presidential approval rating minus at least one standard deviation, or very high, defined here as the mean Presidential approval rating plus at least one standard deviation. Thus, it is hypothesized that voting when one either strongly approves or strongly disapproves of the President provides a subjective benefit because the act of voting facilitates the expression of strong feelings.

A secondary aspect of public choice studies of military conflicts, such as Anderson and Tollison (1991) and Mixon and Trevino (2002), is that voter participation is relatively high during wartime, ceteris paribus. Equation (1) above captures such a conflict -- the U.S.-Iraq War (2004-present) -- through the dummy variable IRAQWAR, which is equal to 1 during the 2004-06 portion of the time-series dataset used in this study (0 otherwise). As such, the coefficient associated with IRAQWAR is expected to be positive. Next, we turn to another military variable of particular interest -- ARMYRECRUITS%. This variable measures the percentage of the U.S. population voluntarily enlisted in the U.S. Army and U.S. Army Reserves in year t. When voluntary enlistments are lower (higher), the social networks attached to the voluntary army are relatively smaller (larger). Thus, ARMYRECRUITS% will in theory negatively impact the VPR.

The third military variable of particular interest, DRAFTDUMMY, is a binary variable equal to 0 for even-numbered election years when the draft was either in effect (i.e., 1960-1972), and equal to 1 when it was no longer in effect (i.e., 1974-2006). This variable is included in the model to reflect the idea that if the public is not subject to a military draft, it is literally much less involved in, and accordingly much less concerned with, the military actions of the U.S. This is because a military conflict does not directly involve the families and friends of draftees. In a sense, a cognitive dissonance exists in a volunteer army regime that results in a separation of the concerns, vis-à-vis military risk, of the general population and that of volunteer soldiers. Given its construct of DRAFTDUMMY is expected to be negatively related to the voter participation rate, ceteris paribus. It this variable – DRAFTDUMMY – that is the primary focus of our study.

3. Econometric Analysis

Augmented Dickey-Fuller and Phillips-Perron unit root tests reveal that over the 1960-2006 study period, UNION, FLFPR, and PCRGDP are not stationary in levels, but are in first differences. Accordingly, the econometric model expresses UNION, FLFPR, and PCRGDP in first differences.
The remaining variables are expressed in levels. The specification in (1) above is estimated by OLS, adopting Newey-West HAC standard errors (Newey and West, 1987). The OLS results are shown in Table 1.

All nine regression coefficients exhibit the expected signs and are statistically significant at the one percent level. The Durbin-Watson and Rho statistics are 1.91 and 0.04, respectively, attesting to the lack of stationarity issues in the model. The F-statistic of 283.7 supports the significance of the overall model. In terms of individual results, it appears that the voter participation rate (VPR) is an increasing function of ELECTDUM. Indeed, the finding is that Presidential election years generate a 15.6 percentage-point greater VPR than mid-term election years. Similarly, the Iraq War acted to raise the VPR by roughly 5.3 percent points. In addition, strong public approval or disapproval of the President raises the VPR by approximately 3.0 percentage points. The VPR is shown to be an increasing function of the unemployment rate, perhaps as a form of “expressive voting” over concern with higher unemployment rates. The impact of unions on the VPR also is shown to be positive. Furthermore, both the female labor force participation rate and per capita income positively impact aggregate voter turnout.

Finally, there are the remaining two military variables, ARMYRECRUITS% and DRAFTDUMMY, which are at the heart of this study. In each case, the estimated coefficient is negative and statistically significant at the one percent level. The first result (for ARMYRECRUITS%) is consistent with the social network hypothesis described above. The second result (for DRAFTDUMMY) – that voter participation rates are 7.4 percentage points lower when a volunteer army replaces military conscription – is consistent with the cognitive dissonance idea that if the public is not subject to a military draft, it is less involved and less concerned with the military actions of the U.S. This empirical link is one that has heretofore been missing in the academic literature.

4. Summary

Taken together, the results in this exploratory study imply that ending the military draft induced increased voter apathy and reduced voter turnout. This finding is consistent with the “expressive voting” literature highlighted in this study. It also supports a broadened interpretation of the rational voter model. The strength of the empirical findings notwithstanding, the central hypothesis at hand requires further development and testing before it can be interpreted as genuinely credible.

Endnotes


2. Delaney, Masters, and Schwochau (1988), Radcliff and Davis (2000), Radcliff (2001), and Leighly and Nagler (2007) characterize unions as important institutions of mass mobilization. The latter of these studies indicates that individual union members are significantly more likely than non-union
members to vote, and that part of the decline in aggregate voter turnout in recent decades is attributable to the decline of unions.

3. Campbell, Converse, Miller and Stokes (1960) found that persons with higher income tended to be especially aware of the economic stakes that were potentially at issue as a result of elections.

4. Over the 47 year period studied in this paper, the mean public approval rating of the incumbent President was 53.16 out of a possible 100.0, with a standard deviation of 11.22.

5. Given the distribution of the public approval ratings, PRESAPPDUMMY is equal to 1 for approval ratings of (1) roughly 42 or less, and (2) roughly 64 or more; PRESAPPDUMMY is equal to 0 otherwise.

References


http://www.geocities.com/americanpresidencynet/approval.htm

http://www.infoplease.com

http://isr.umich.edu

http://www.ttaxfoundation.org/prtopincometable.html


Table 1
Summary Statistics & OLS Regression Results: Dependent variable, VPR

<table>
<thead>
<tr>
<th>Regressors</th>
<th>Coefficient</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>constant</td>
<td>30.6</td>
<td>16.27</td>
</tr>
<tr>
<td>ELECTDUM [0.50; 0.51]</td>
<td>15.58</td>
<td>31.99</td>
</tr>
<tr>
<td>UNEMPRATE [5.80;1.40]</td>
<td>1.78</td>
<td>6.24</td>
</tr>
<tr>
<td>ΔUNION [18.01; 5.98]</td>
<td>1.12</td>
<td>3.28</td>
</tr>
<tr>
<td>IRAQWAR [0.08; 0.28]</td>
<td>5.34</td>
<td>5.40</td>
</tr>
<tr>
<td>ARMYRECRUITS% [0.10; 0.08]</td>
<td>−20.24</td>
<td>−5.30</td>
</tr>
<tr>
<td>DRAFTDUMMY [0.71; 0.46]</td>
<td>−7.43</td>
<td>−11.26</td>
</tr>
<tr>
<td>ΔFLFPR [41.82; 4.63]</td>
<td>2.65</td>
<td>4.65</td>
</tr>
<tr>
<td>ΔPCRGDP [24,933; 7,206]</td>
<td>0.003</td>
<td>4.35</td>
</tr>
<tr>
<td>PRESAPPDUMMY [0.33; 0.48]</td>
<td>2.98</td>
<td>4.69</td>
</tr>
<tr>
<td>$F$-statistic</td>
<td>283.74</td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.94</td>
<td></td>
</tr>
<tr>
<td>Durbin-Watson statistic $Rho$</td>
<td>1.91</td>
<td>0.04</td>
</tr>
</tbody>
</table>

Notes: Numbers in brackets below the variables are means and standard deviations, respectively (for dependent variable, VPR, these are 45.98 and 9.80, respectively). Terms in parentheses are $t$-statistics from Newey-West HAC standard errors (Newey and West, 1987). $\Delta$ is the first difference operator.