

Registration and Voting Participation Differences Between the Active Duty Military and Citizen Voting Age Populations in the 2014 Election

Introduction

The Federal Voting Assistance Program (FVAP) compares the voter registration and participation rates of active duty military voters covered by the *Uniformed and Overseas Citizens Absentee Voting Act (UOCAVA)* to those of the citizen voting age population (CVAP).¹ These comparisons identify the extent to which military voters are able to exercise their right to vote and, for those who do exercise this right, the extent to which participation is comparable to the general population.

The active duty military (ADM) population differs from the CVAP in a wide variety of ways, including age, sex, education, and mobility. Careful consideration of these differences is required in order to make useful comparisons of these two populations. Historically, FVAP has made comparisons by adjusting the ADM survey data to match the relative CVAP estimates of age and sex. However, it has not adjusted the ADM survey data to account for differences based on education and mobility.²

A previous research note, "Registration and Voting Participation Differences Between the Active Duty Military And Citizen Voting Age Populations,"³ discussed how the comparison between ADM and CVAP registration and voter participation rates had been made in the past, described how a statistical modeling approach could make a more appropriate and useful comparison, and then showed the results of such a modeling strategy using data from the 2012 elections.

The primary factors influencing registration and participation rates are age, education, employment status, sex, race and ethnicity, region, residential mobility, and state-specific election procedures.

This report updates that previous research note and applies the same analytic strategy to data on ADM and CVAP voting behavior in the 2014 general election. There are substantial differences between the 2012 and 2014 elections that should be considered when comparing the results of this analysis. First, the previous research note focused on voting behavior in a presidential election, while this note compares ADM and CVAP during a midterm election year. Presidential elections are generally high intensity events, and turnout in 2012 was near record highs among young citizens (age 18-24), who are overrepresented in the ADM population. Conversely, participation is typically low in midterm years; turnout among 18-24 year old citizens in the 2014 midterm election was only 17.1%, the lowest rate in over six decades.⁵ Second, troop drawdowns in Iraq and Afghanistan mean the size and composition of the deployed ADM population was substantially different in 2014 compared to 2012, and the logistical challenges to participation for ADM were likely quite different across these elections. Finally, the policy debates central to the 2014 election might have had different levels of relative importance to one or both populations than those in the 2012 election, resulting in relative participation differences between the CVAP and ADM populations across elections. A comparison of the results of this research note (focusing on 2014 election data) to the earlier research note (which focused on data from the 2012 presidential election) may shed light on the degree to which relative participation rates vary over time and in different electoral environments.

1 See FVAP's "2012 Post-Election Report to Congress." The CVAP consists of U.S. citizens who are 18 years of age or older.

2 Specifically, FVAP uses "industry standard statistical methods to normalize the active duty military population to be demographically similar to the CVAP" (FVAP's "2012 Post-Election Report to Congress," page 4).

3 FVAP. (2014). "Registration and Voting Participation Differences Between the Active Duty Military And Citizen Voting Age Population." http://www.fvap.gov/uploads/FVAP/Reports/2014_FVAP_Research_Note_1_Final_April_11_2014.pdf

4 In this analysis, "voter participation" is used to refer specifically to voter turnout.

5 U.S. Census Bureau. (2014). "Reported Voting and Registration by Race, Hispanic Origin, Sex, and Age Groups: November 1964 to 2014." <https://www.census.gov/hhes/www/socdemo/voting/publications/historical/>

Methodology

Statistical modeling can help answer the basic research question of how the registration and participation rates of the ADM compare with the registration and participation rates of the CVAP that most closely resembles the ADM. The method used in FVAP's 2012 and 2014 Post-Election Reports to Congress essentially modifies the composition of the ADM to resemble the CVAP instead of identifying a comparable CVAP subpopulation. The modeling approach utilized in this report (described in more detail in Appendix A) provides greater insight into how the voting behavior of ADM and CVAP compare and also explicitly highlights the potential causes of registration and participation differences.

Modeling voter registration and participation rates using demographic and administrative factors has been done since the late 1970s. The primary factors that have been found to influence registration and participation rates are age, education, employment status, sex, race and ethnicity, region, residential mobility,⁶ and state-specific administrative procedural issues.⁷ Because the present analysis includes both *UOCAVA* and non-*UOCAVA* voters across multiple data sets, it is not possible to include all of these variables in this analysis. For example, because all ADM members are, by definition, employed in the Military, the CVAP comparison group only includes employed CVAP respondents. State-specific administrative and procedural issues were not included because these rules differ significantly for *UOCAVA* and non-*UOCAVA* voters. Instead, indicator variables for region were used to capture variation in electoral culture and conditions across the United States. In addition, variables that have been found to influence registration and voting rates in ADM, such as family and marital status, were included in this analysis. More information on the specific variables used from each data set can be found in Appendix A.

Data Sources

The data used in this research note come from two sources: FVAP's 2014 Post-Election Voting Survey of the ADM population and the November 2014 Current Population Survey (CPS) Voting and Registration Supplement.⁸

Results

The left panel of Figure 1 reports the estimated 2014 voter registration rates for the ADM population from the 2014 Report to Congress, the estimates of the ADM population whose demographics characteristics match that of the CVAP (also from the congressional report), and the 2014 CVAP registration rates reported by the U.S. Census Bureau. These results show that both the unadjusted and adjusted ADM populations register at a higher rate than the CVAP.

6 There are important differences in how mobility is measured in both surveys. In the ADM survey, mobility was measured by whether the individual experienced a change in deployment or permanent change of station/address, or was deployed on Election Day. In the CVAP survey, it was measured by whether there was a change in residential address. These are the best measures currently available for mobility in the two surveys, but the observed group differences could be artifacts of using different measures in each group. However, it is important to note that for both registration and voting, mobility was a relatively significant difference in both the explained and unexplained components of the models.

7 Wolfinger, R. E., & Rosenstone, S. J. (1980). *Who votes?*. Yale University Press.

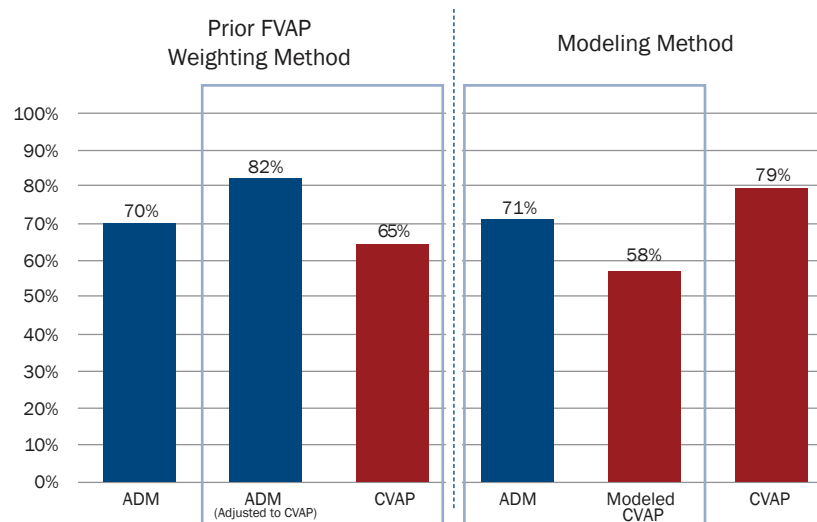
8 This analysis used a version of the 2014 FVAP ADM Post-Election Survey data set obtained from the Department of Defense. Details on FVAP's 2014 Post-Election Voting Survey can be found at <http://www.fvap.gov/info/reports-surveys>. Information on the CPS and the Voting and Registration Supplement can be found at <http://www.census.gov/hhes/www/socdemo/voting/>.

Registration and Voting Participation Differences Between the Active Duty Military and Citizen Voting Age Populations in the 2014 Election

The right panel of Figure 1 reports the FVAP estimated 2014 registration rates for the ADM population, a hypothetical CVAP population whose demographics match those of ADM, and the employed CVAP population.⁹ The un-modeled CVAP voter registration rate (the CPS registration rate excluding respondents who reported being unsure whether or not they voted) is 79%,¹⁰ or 8 percentage points higher than the ADM registration rate of 71%. Once modeling adjustments are made to the CVAP based on age, sex, education, mobility, marital status, race, region, and family status, the ADM respondents are almost 13 percentage points *more* likely to be registered than their modeled CVAP counterparts.

It should again be noted that the overall ADM and CVAP rates shown in the second panel differ slightly from those discussed in FVAP's 2014 Post-Election Report to Congress, shown in the left panel of Figure 1. This is due to differences in the way voting participation variables were coded in the analyses, and differences in study samples. In this analysis, respondents who were not sure if they voted were excluded from both the CPS and Post-Election Survey samples. Additionally, the CVAP and ADM populations used in this analysis were restricted to respondents who were employed and had data available for all relevant variables. More information on these differences can be found in Appendix A.

**FIGURE 1. 2014 REGISTRATION RATE,
PRIOR FVAP METHOD AND NEW MODELING METHOD**



Note: The ADM and CVAP registration rates for this analysis differ from the prior FVAP analysis due to differences in the ADM and CVAP samples. Data requirements for the new analysis necessitate the exclusion of observations in the Post-Election Survey and November CPS, resulting in different registration rates. See Appendix A for specific exclusion criteria.

⁹ The analysis was only conducted on cases where data for all relevant variables was available.

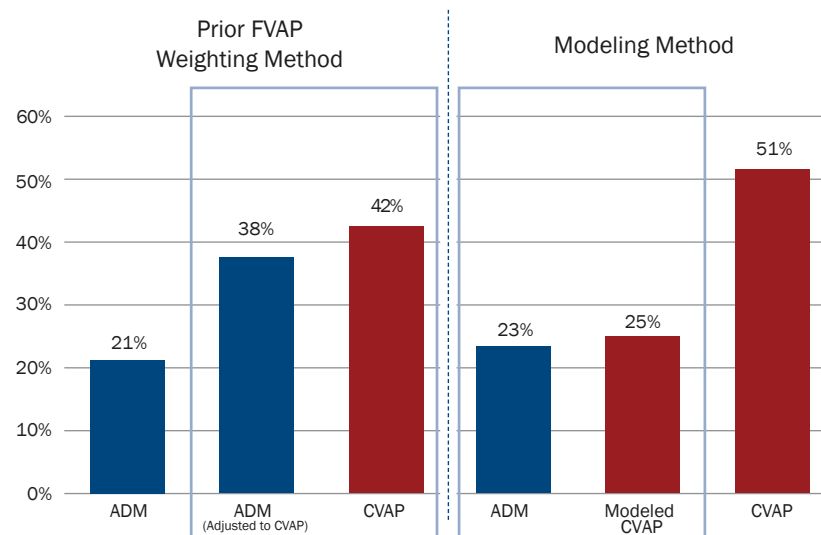
¹⁰ The difference between this un-modeled CVAP score of 79% and that reported by CPS and FVAP in the 2014 report to Congress is largely due to the removal of the unemployed, which was responsible for a loss of 45,212 total respondents from the November CPS survey.

Registration and Voting Participation Differences Between the Active Duty Military and Citizen Voting Age Populations in the 2014 Election

Figure 2 reports an equivalent set of estimates for the participation (voting) rate. In the FVAP analysis, the ADM population votes at a lower rate than the CVAP, even when adjusted to match CVAP on key demographic variables. When the ADM composition is adjusted using FVAP's methodology, the gap between the ADM and CVAP drops from 21 percentage points to 4 percentage points.

Within the modeling framework, the gap between the un-modeled CVAP and the ADM population turnout rate is 28 percentage points. Once the CVAP is modeled to be demographically similar to the ADM, the gap between the modeled CVAP and ADM populations drops to 2.6 percentage points. More detailed results of the analyses can be found in Appendix B.

**FIGURE 2. 2014 VOTER PARTICIPATION RATE,
PRIOR FVAP METHOD AND NEW MODELING METHOD**



Note: The ADM and CVAP voting rates for this analysis differ from the prior FVAP analysis due to differences in the ADM and CVAP sample. Data requirements for the new analysis necessitate the exclusion of observations in the Post-Election Survey and November CPS, resulting in different turnout rates. See Appendix A for specific exclusion criteria.

The modeled CVAP registration rate is estimated to be approximately 12 percentage points lower than the adjusted ADM rate. However, the percentage of ADM respondents who turned out to vote was 2.6 percentage points lower, on average, than among CVAP respondents with similar demographic characteristics. This contrasts with the 2 percentage point higher participation rate estimated using data from the 2012 election. This difference is to be expected given the lower prominence of midterm elections, the lower intensity of campaigns, and the general disinterest among young voters in 2014 relative to 2012.

In order to determine which factors are responsible for the remaining gap in registration and voting between the ADM and CVAP, a Blinder-Oaxaca decomposition model was applied. This technique shows which variables in the model contribute most to these estimated gaps. Table 1 shows the percentage of the difference in registration and voting attributable to each variable. All things being equal, negative values mean the gap between the ADM and modeled CVAP is smaller as a result of differences in how the variable is correlated with participation across

Registration and Voting Participation Differences Between the Active Duty Military and Citizen Voting Age Populations in the 2014 Election

the two populations, while positive values mean that the gap between the ADM and the modeled CVAP is larger due to the difference in these relationships.

Consistent with results from the earlier research note, differences in the role of mobility tend to mitigate the gap in participation and enhance the ADM advantage with respect to registration. This is because mobility exerts a smaller downward effect on propensity to register and vote in the ADM population relative to its influence on the CVAP. For example, CVAP respondents who changed residences in the last 12 months are significantly less likely to register. In contrast, changing duty station within the last 12 months has almost no effect on the likelihood of registration among ADM respondents.

Another important example is the difference in the role of education in voting behavior between the ADM and CVAP. Education is a less important predictor of participation among ADM than it is for the CVAP.¹¹ The negative coefficients on education in the decomposition analyses shown in Table 1 indicate that the gaps in registration and voting decrease as a result of this difference in how education is related to participation. In the CVAP, the difference in registration propensity between someone who obtained a graduate degree and someone who never completed college – all other things being equal – is 22 percentage points. However, in the ADM population, this difference is only 13 percentage points. This difference in the relationship between registration and education between the two populations accounts for a quarter of the total difference in registration between the modeled CVAP and ADM population (3.10 percentage points out of 12.45).

TABLE 1. REGISTRATION AND VOTING PARTICIPATION MODELS, CVAP REFERENCE

DIFFERENCE IN ADM AND MODELED CVAP REGISTRATION RATE		DIFFERENCE IN ADM AND MODELED CVAP VOTING RATE	
Variable	Percent Difference	Variable	Percent Difference
Mobility	-8.99***	Mobility	-6.90***
Male	-2.44*	Male	-3.90***
Family Status	-1.14	Family Status	-0.58
Education	-3.10***	Education	-4.47***
Age	0.53	Age	0.22
Race	-1.31**	Race	1.64***
Region	-0.26	Region	-1.13***
Constant	4.25**	Constant	17.74***
Total Difference	-12.45***	Total Difference	2.61***

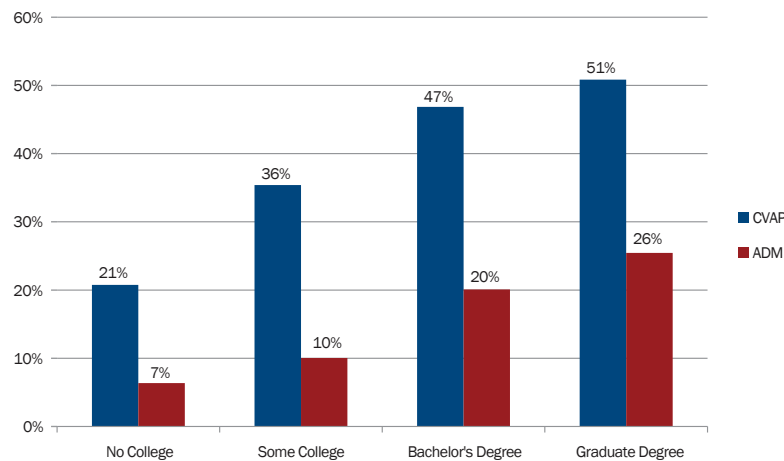
* $p < .10$, ** $p < .05$, *** $p < .01$. The Total Difference is the difference between the ADM and adjusted CVAP registration and voting rates.

¹¹ The difference in how these variables function in the CVAP and ADM populations is detailed in the regression results provided in Appendix C.

Registration and Voting Participation Differences Between the Active Duty Military and Citizen Voting Age Populations in the 2014 Election

A similar difference in the effect of education is observed in the model of voting participation. The gap between the ADM and modeled CVAP voting rates is larger for more educated ADM. This is illustrated in Figure 3, which shows the predicted participation rates generated across levels of education using both the CVAP and ADM voting models for a hypothetical white, single male with children, age 18-24, whose state of legal residence is in the New England Census region, and who has not changed residence (or been deployed) in the year prior to the election. The gap in participation between an individual with these characteristics in the CVAP and an individual with these characteristics in the ADM population is 14 percentage points if the individual has no college education, and it is 25 percentage points with a graduate education.

**FIGURE 3. PREDICTED PARTICIPATION RATE BY EDUCATIONAL ATTAINMENT
FOR BASELINE INDIVIDUAL EMPLOYED CVAP AND ADM POPULATIONS**



One potential explanation for the attenuated relationship between education and participation among ADM is the existence of FVAP voter assistance resources. These resources may disproportionately benefit less-educated ADM who might otherwise struggle to navigate the complex *UOCAVA* voting process. This explanation is consistent with the higher registration rates of the ADM relative to the CVAP in both the 2012 and 2014 elections, which imply that ADM are better able to overcome the direct costs of registration than demographically similar voting-age citizens. Another explanation that is consistent with the lower voting rate of the ADM population relative to the CVAP population in 2014 – as well as the higher voting rate of the ADM population relative to the CVAP population 2012 – is a difference in ADM motivation to vote in the presidential election versus the midterm election. The midterm effect may be stronger for more educated ADM because education is among the strongest predictors of political interest and engagement,¹² and the campaign activity and media coverage that typically mobilize these voters are less intense in midterm elections. Finally, it may simply be the case that, among less educated individuals, those with the higher propensity to vote are also most likely to join the military, while the reverse may be true for more educated individuals.

¹² For example, Carpini, M. X. D., & Keeter, S. (1997). *What Americans know about politics and why it matters*. Yale University Press.
Zaller, J. (1992). *The nature and origins of mass opinion*. Cambridge University Press.

Registration and Voting Participation Differences Between the Active Duty Military and Citizen Voting Age Populations in the 2014 Election

The limitations associated with this analysis include the problems associated with self-reported registration and voting behaviors, variation in survey approaches across the CPS and FVAP surveys, and the use of different data sources. For its report to Congress, FVAP does not have access to the same Census data as are available for this analysis (due to timing of the data releases).

Conclusion

Expanding on the methodological approach established in a previous research note assessing the 2012 presidential election, this report compares rates of ADM and CVAP registration and voting in the 2014 midterm election. Rather than estimating rates by weighting ADM to approximate CVAP, the analysis presented here compares registration and voting rates in the ADM population to a demographically similar subset of the CVAP. Results indicate that the gap between ADM and CVAP is not as large as unweighted data suggest. Just as in 2012, during the 2014 midterm election ADM registered to vote at a higher rate than CVAP members with similar characteristics. Unlike in 2012, turnout among ADM was slightly lower than among the CVAP, though limiting comparisons to demographically similar CVAP significantly reduced the magnitude of this turnout gap so that the voting rates were almost equal across populations. This difference is unsurprising given the lower intensity of midterm election campaigns and the historically low rate of turnout among young voters in 2014.

These findings provide important new insight into the behavior of ADM voters in presidential versus midterm elections. As noted, the lower turnout rate among ADM relative to CVAP is likely the result of the lower intensity of mobilizing information during midterm elections relative to more high-profile presidential races. Further, it is possible that ADM perceive State and local races to have less direct relevance to their lives and are less motivated to vote in midterm elections than in presidential elections where a Commander in Chief is being selected. These interpretations are consistent with the finding that the relationship between education and participation is weaker among ADM than in the CVAP. More educated ADM have the highest probability of receiving mobilizing messages, and are therefore most sensitive to variation in the intensity of these messages in presidential versus midterm elections.

Determining the motivational factors that affect ADM voting in midterm versus presidential elections warrants further investigation. In particular, the modeling methodology should be replicated using data from future presidential and midterm Post-Election Voting Surveys. Such work would not only provide further insight into the registration and voting behavior of the CVAP versus ADM population, but can also help FVAP determine how to best allocate resources and effectively reach potential ADM voters across various election cycles.

Appendix A

The specific variables used in the model for the CVAP are listed below.

- VOTE_recode (1 if stated voted in 2014, 0 if did not vote)
- REGVOTE_recode (1 if voted in 2014 or didn't vote but stated registration, 0 if not registered)
- MALE (1 for males, 0 for females)
- CHANGERESIDENCE_recode (1 if changed residential address in past year, 0 if in residential address 1 year or longer)
- FAMSTAT (1 if single with children, 2 if single without children, 3 if married with children, 4 if married without children)
- CEDUC (1 if no college education, 2 if some college or associate's degree, 3 if bachelor's degree in college, 4 if MA/PhD/professional degree)
- AGE_5 (1 is 18–24, 2 is 25–29, 3 is 30–34, 4 is 35–44, 5 is older than 45)
- EMPLOYED (1 if employed and working, 0 if unemployed or not in labor force)
- CRACE_ETH (1 for non-minority, 2 for non-Hispanic Black, 3 for Hispanic, 4 for all others)
- REGION (10 U.S. Census Bureau regions)¹³

Similar variables were included for the ADM; the primary difference between the CVAP and ADM variables was the measurement of mobility. Rather than residential address change, in the ADM “mobility” indicated if the individual had been deployed in the past year or not, experienced a permanent change in station, or was deployed on Election Day.

In the analyses used in FVAP's 2012 and 2014 reports to Congress, respondents who reported being unsure about voting were included with non-voters; in this analysis as well as that undertaken in the previous research note, such respondents were not included in the samples for either the CVAP or ADM population. This was done because the theory used to justify the included covariates addresses the distinctions between voters and non-voters, but has little to say about the distinction between known voters and those who are unsure about whether they voted or did not respond to the survey. As discussed by Hur and Achen (2013), this coding also complicates the comparison of participation rates over time.¹⁴

In addition, because employment is an important covariate for understanding political participation, and all ADM members are, by definition, employed in the Military, CVAP respondents who were not employed were excluded from the model.

Finally, for both ADM and CVAP, the sample was restricted to those respondents who had data for all relevant variables. Specifically, a total of 15,585 observations (25%) were dropped from the employed CPS sample, and 2,146 observations (17%) were dropped from the ADM sample.

¹³ New England (CT, ME, MA, NH, RI, VT), Middle Atlantic (NJ, NY, PA), East North Central (IN, IL, MI, OH, WI), West North Central (IA, KS, MN, MO, NE, ND, SD), South Atlantic (DE, DC, FL, GA, MD, NC, SC, VA, WV), East South Central (AL, KY, MS, TN), West South Central (AR, LA, OK, TX), Mountain (AZ, CO, ID, NM, MT, UT, NV, WY), Pacific (AK, CA, HI, OR, WA), Other Territories (AS, GU, PR, VI).

¹⁴ Hur, A., & Achen, C. H. (2013). Coding Voter Turnout Responses in the Current Population Survey. *Public Opinion Quarterly*, nft042.

Registration and Voting Participation Differences Between the Active Duty Military and Citizen Voting Age Populations in the 2014 Election

This analysis used the Blinder-Oaxaca decomposition technique, which is often applied in labor economics, to examine the effects of these factors on voting.¹⁵ This technique creates a hypothetical CVAP that is demographically similar to the ADM population, and uses this to determine the size and statistical significance of the differences between the ADM and CVAP registration and voting rates not explained by differences in demography. In addition, the procedure allows differences in voting behavior to be attributed to various factors.¹⁶

The Decomposition results presented in Appendix B are generated using Oaxaca Stata program (Jann, 2008). Total explained difference is the percentage point difference between modeled and un-modeled CVAP. This explained difference results from changing the distribution of the predictor variables in the CVAP to match that of the ADM population, while using the CVAP model to generate predictions of registration and voting. The difference in registration and voting propensity between modeled and un-modeled CVAP is therefore entirely driven by differences in observed characteristics between the CVAP and ADM population, and is thus “explained.” This explained difference can then be decomposed to obtain the percentage point shift in registration and voting by the CVAP that results from changing the mean value of each predictor in the CVAP to match that in the ADM population. The total unexplained difference is the percentage point difference between the modeled CVAP and ADM population. Because the modeled CVAP and ADM populations have the same characteristics, this difference results entirely from variations in how these characteristics relate to registration and voting. These variations in associations reflect unobserved differences in the CVAP and ADM population, and are thus “unexplained.” The unexplained difference can be decomposed to obtain the percentage point shift in the registration and voting rates in the modeled CVAP that would result from changing the CVAP coefficient of a given variable to match that in the ADM registration or voting model. Family status, race, education, age, and region are subject to the deviation contrast transform to make decomposition invariant to excluded category. See Jann (2008) for more details.

¹⁵ The specific methodology is commonly referred to as the Blinder-Oaxaca decomposition, a methodology widely used in labor economics to study group differences in a variety of economic settings—most commonly, differences in wage rates. For more information, see the following: Oaxaca, R. (1973). Male-female wage differentials in urban labor markets. *International Economic Review*, 14(3), 693–709. Blinder, A. S. (1973). Wage discrimination: Reduced form and structural estimates. *The Journal of Human Resources*, 8(4), 436–455. A discussion of the decomposition methods incorporated into the statistical framework used in this analysis can be found in the following: Jann, B. (2008). The Blinder-Oaxaca decomposition for linear regression models. *The Stata Journal*, 8(4), 453–479. Retrieved from <http://www.stata-journal.com/sjpdf.html?articlenum=st0151>. Jann’s procedure is contained in the STATA procedure *oaxaca*.

¹⁶ For the purpose of decomposition, this research note utilizes a linear probability model of registration and voting. For robustness a similar logit specification of these outcomes, where the coefficients for the explanatory variables were allowed to differ between the ADM and CVAP population, was estimated. This model was used to generate an estimate of the average marginal effect of being ADM for the ADM population, which is equivalent to the total unexplained difference in our baseline results. The estimates of the total unexplained difference did not differ significantly between the linear and non-linear models.

Registration and Voting Participation Differences Between the Active Duty Military and Citizen Voting Age Populations in the 2014 Election

Appendix B

TABLE 2: REGISTRATION MODEL, CVAP REFERENCE

VARIABLE	FREQUENCY/ DIFFERENCE (PERCENT SCALE)	STANDARD ERROR	95% CI LOWER BOUND	95% CI UPPER BOUND
Total Difference (CVAP – ADM)				
CVAP	78.94***	0.22	78.51	79.36
ADM	70.77***	0.57	69.66	71.89
Difference	8.17***	0.61	6.97	9.36
Explained Difference (CVAP – Modeled CVAP)				
Mobility	6.27***	0.34	5.61	6.93
Male	1.11***	0.14	0.84	1.37
Family	0.19**	0.07	0.04	0.33
Education	5.75***	0.20	5.35	6.15
Age	7.24***	0.30	6.65	7.82
Race	0.18**	0.08	0.03	0.34
Region	-0.12	0.08	-0.28	0.03
Total Explained	20.61***	0.49	19.66	21.57
Unexplained Difference (Modeled CVAP – ADM)				
Mobility	-8.99***	0.79	-10.54	-7.43
Male	-2.44*	1.32	-5.02	0.14
Family	-1.14*	0.69	-2.49	0.22
Education	-3.10***	0.56	-4.19	-2.01
Age	0.53	0.38	-0.22	1.27
Race	-1.31**	0.57	-2.41	-0.20
Region	-0.26	0.44	-1.13	0.61
Constant	4.25**	1.72	0.88	7.63
Total Unexplained	-12.45***	0.77	-13.95	-10.94

* $p < .10$, ** $p < .05$, *** $p < .01$. Associated ordinary least squares (OLS) regression results are presented in Tables 4 and 5.

Registration and Voting Participation Differences Between the Active Duty Military and Citizen Voting Age Populations in the 2014 Election

TABLE 3: VOTING MODEL, CVAP REFERENCE

VARIABLE	FREQUENCY/ DIFFERENCE (PERCENT SCALE)	STANDARD ERROR	95% CI LOWER BOUND	95% CI UPPER BOUND
Total Difference (CVAP – ADM)				
CVAP	50.94***	0.26	50.43	51.46
ADM	22.67***	0.52	21.65	23.93
Difference	28.27***	0.58	27.13	29.41
Explained Difference (CVAP – Modeled CVAP)				
Mobility	6.99**	0.33	6.34	7.64
Male	0.74***	0.16	0.43	1.06
Family	0.49***	0.09	0.30	0.67
Education	6.69***	0.23	6.24	7.15
Age	10.93***	0.31	10.32	11.55
Race	0.24**	0.09	0.05	0.42
Region	-0.43***	0.10	-0.62	-0.23
Total Explained	25.66***	0.50	24.67	26.64
Unexplained Difference (Modeled CVAP – ADM)				
Mobility	-6.90***	0.74	-8.36	-5.45
Male	-3.90***	1.23	-6.31	-1.49
Family	-0.58	0.69	-1.94	0.78
Education	-4.47***	0.62	-5.68	-3.26
Age	0.22	0.42	-0.61	1.04
Race	1.64***	0.51	0.65	2.63
Region	-1.13***	0.39	-1.89	-0.38
Constant	17.74***	1.65	14.50	20.98
Total Unexplained	2.61***	0.70	1.23	3.99

* $p < .10$, ** $p < .05$, *** $p < .01$. Associated ordinary least squares (OLS) regression results are presented in Tables 6 and 7.

Appendix C

TABLE 4: REGISTRATION REGRESSION, CVAP

VARIABLE	COEFFICIENT	STANDARD ERROR	95% CI LOWER BOUND	95% CI UPPER BOUND
Mobility	-0.14***	0.01	-0.15	-0.13
Male	-0.03***	0.00	-0.04	-0.03
Single Without Children	0.00	0.01	-0.02	0.02
Married With Children	0.04***	0.01	0.02	0.06
Married Without Children	0.05***	0.01	0.03	0.07
Some College or Associate's Degree	0.14***	0.01	0.13	0.16
Bachelor's Degree in College	0.20***	0.01	0.19	0.21
MA/PhD/Professional degree	0.22***	0.01	0.20	0.23
25-29	0.06***	0.01	0.04	0.08
30-34	0.10***	0.01	0.08	0.12
35-44	0.15***	0.01	0.13	0.17
45+	0.20***	0.01	0.18	0.21
Non-Hispanic Black	0.05***	0.01	0.04	0.07
Hispanic	-0.09***	0.01	-0.11	-0.07
Other	-0.12***	0.01	-0.14	-0.11
Middle Atlantic	-0.01	0.01	-0.03	0.01
East North Central	0.01	0.01	-0.01	0.03
West North Central	0.01	0.01	-0.01	0.03
South Atlantic	0.03***	0.01	0.01	0.04
East South Central	0.02	0.01	0.00	0.04
West South Central	-0.02**	0.01	-0.04	0.00
Mountain	-0.01	0.01	-0.02	0.01
Pacific	0.00	0.01	-0.02	0.01
Constant	0.55***	0.01	0.52	0.58

* $p < .10$, ** $p < .05$, *** $p < .01$. The model was estimated using OLS. Observations are weighted using non-response/post-stratification weights. Standard errors are robust to heteroscedasticity. $N=47,931$

Registration and Voting Participation Differences Between the Active Duty Military and Citizen Voting Age Populations in the 2014 Election

TABLE 5: REGISTRATION REGRESSION, ADM

VARIABLE	COEFFICIENT	STANDARD ERROR	95% CI LOWER BOUND	95% CI UPPER BOUND
Mobility	0.01	0.01	-0.01	0.03
Male	0.00	0.02	-0.03	0.02
Single Without Children	0.07**	0.03	0.00	0.13
Married With Children	0.05*	0.03	-0.01	0.11
Married Without Children	0.05*	0.03	-0.01	0.12
Some College or Associate's Degree	0.05***	0.02	0.02	0.09
Bachelor's Degree in College	0.15***	0.01	0.12	0.18
MA/PhD/Professional Degree	0.13***	0.02	0.09	0.16
25-29	0.10***	0.02	0.07	0.13
30-34	0.17***	0.02	0.13	0.21
35-44	0.21***	0.02	0.17	0.25
45+	0.22***	0.02	0.18	0.26
Non-Hispanic Black	-0.04**	0.02	-0.08	-0.01
Hispanic	-0.10***	0.02	-0.14	-0.06
Other	-0.13***	0.02	-0.17	-0.09
Middle Atlantic	0.02	0.04	-0.06	0.10
East North Central	0.00	0.04	-0.08	0.07
West North Central	-0.01	0.04	-0.09	0.07
South Atlantic	0.03	0.04	-0.05	0.10
East South Central	-0.05	0.04	-0.13	0.03
West South Central	-0.01	0.04	-0.08	0.07
Mountain	0.01	0.04	-0.07	0.08
Pacific	-0.01	0.04	-0.09	0.06
Constant	0.54***	0.05	0.44	0.63

* $p < .10$, ** $p < .05$, *** $p < .01$. The model was estimated using OLS. Observations are weighted using non-response/post-stratification weights. Standard errors are robust to heteroscedasticity. $N=10,758$

Registration and Voting Participation Differences Between the Active Duty Military and Citizen Voting Age Populations in the 2014 Election

TABLE 6: VOTING REGRESSION, CVAP

VARIABLE	COEFFICIENT	STANDARD ERROR	95% CI LOWER BOUND	95% CI UPPER BOUND
Mobility	-0.16***	0.01	-0.17	-0.14
Male	-0.02***	0.00	-0.03	-0.01
Single Without Children	0.02*	0.01	0.00	0.04
Married With Children	0.05***	0.01	0.03	0.08
Married Without Children	0.10***	0.01	0.08	0.12
Some College or Associate's Degree	0.14***	0.01	0.13	0.15
Bachelor's Degree in College	0.25***	0.01	0.24	0.27
MA/PhD/Professional Degree	0.30***	0.01	0.29	0.32
25-29	0.01	0.01	-0.01	0.03
30-34	0.07***	0.01	0.04	0.09
35-44	0.13***	0.01	0.11	0.15
45+	0.26***	0.01	0.24	0.28
Non-Hispanic Black	0.07***	0.01	0.05	0.08
Hispanic	-0.10***	0.01	-0.12	-0.09
Other	-0.16***	0.01	-0.18	-0.14
Middle Atlantic	-0.10***	0.01	-0.12	-0.08
East North Central	-0.03***	0.01	-0.05	-0.01
West North Central	-0.02	0.01	-0.04	0.00
South Atlantic	0.00	0.01	-0.02	0.02
East South Central	-0.04***	0.01	-0.07	-0.02
West South Central	-0.07***	0.01	-0.10	-0.05
Mountain	0.00	0.01	-0.02	0.03
Pacific	-0.02*	0.01	-0.04	0.00
Constant	0.23***	0.02	0.21	0.26

* $p < .10$, ** $p < .05$, *** $p < .01$ The model was estimated using OLS. Observations are weighted using non-response/post-stratification weights. Standard errors are robust to heteroscedasticity. $N=47,931$

Registration and Voting Participation Differences Between the Active Duty Military and Citizen Voting Age Populations in the 2014 Election

TABLE 7: VOTING REGRESSION, ADM

VARIABLE	COEFFICIENT	STANDARD ERROR	95% CI LOWER BOUND	95% CI UPPER BOUND
Mobility	-0.04***	0.01	-0.06	-0.02
Male	0.02*	0.01	0.00	0.05
Single Without Children	0.03	0.03	-0.03	0.09
Married With Children	0.06*	0.03	-0.01	0.12
Married Without Children	0.03	0.03	-0.03	0.10
Some College or Associate's Degree	0.03*	0.02	-0.01	0.06
Bachelor's Degree in College	0.13***	0.02	0.10	0.17
MA/PhD/Professional Degree	0.20***	0.02	0.15	0.24
25–29	0.04***	0.01	0.02	0.07
30–34	0.10***	0.02	0.06	0.14
35–44	0.18***	0.02	0.14	0.22
45+	0.27***	0.02	0.23	0.32
Non-Hispanic Black	-0.02	0.02	-0.05	0.01
Hispanic	-0.04***	0.02	-0.07	-0.01
Other	-0.04**	0.02	-0.07	-0.01
Middle Atlantic	0.01	0.03	-0.05	0.08
East North Central	0.03	0.03	-0.03	0.09
West North Central	0.03	0.03	-0.04	0.09
South Atlantic	0.07***	0.03	0.02	0.13
East South Central	-0.01	0.03	-0.07	0.05
West South Central	0.02	0.03	-0.04	0.08
Mountain	0.07**	0.03	0.01	0.13
Pacific	0.06**	0.03	0.01	0.12
Constant	0.04	0.04	-0.04	0.13

* $p < .10$, ** $p < .05$, *** $p < .01$ The model was estimated using OLS. Observations are weighted using non-response/post-stratification weights. Standard errors are robust to heteroscedasticity. N=10,758