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REGISTRATIONS: A REPLY TO THE CRITICS

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WELFARE REFORM AND PUBLIC ASSISTANCE VOTER REGISTRATIONS: A REPLY TO THE CRITICS

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Abstract: *A previous Heritage Foundation report found that declining welfare caseloads contributed substantially to the decline in public assistance voter registrations from 1996 to 2006. Despite recent criticisms by R. Michael Alvarez and Jonathan Nagler, this finding still holds. Members of Congress, policymakers, and the media should not dismiss the major role that welfare reform and decreased welfare participation have played in reducing voter registrations at state public assistance offices.*

Demos, a progressive think tank, recently released a critical review of a 2008 Heritage Foundation *Center for Data Analysis Report* that linked the decline in public assistance voter registrations to declines in welfare caseloads.¹ R. Michael Alvarez of the California Institute of Technology and Jonathan Nagler of the New York University, the authors of the Demos report, questioned the validity of the Heritage finding that the decline in Aid to Families with Dependent Children (AFDC) and Temporary Assistance for Needy Families (TANF) caseloads is associated with the decline in citizens registering to vote at public assistance offices.²

The authors of the Heritage Foundation report dispute Alvarez and Nagler's conclusion.

BACKGROUND

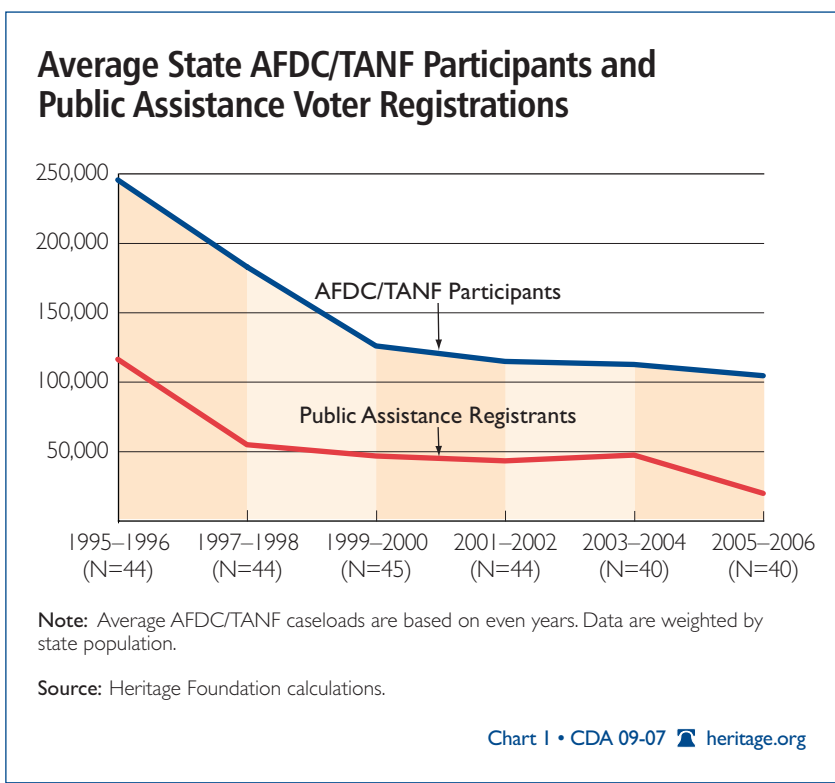
The National Voter Registration Act of 1993 requires states to allow eligible persons to register to vote at various government locations, including public assistance and motor vehicle offices. Starting in 1995, states reported the number of voter regis-

trations by registration location in two-year intervals. Since the initial reporting period (1995–1996), the number of persons registering to vote at public assistance offices has steadily declined.

This trend has led some to speculate that the states are failing to provide welfare recipients with the opportunity to register to vote at public assistance offices. Another contributing factor may be the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996, which led to unprecedented declines in welfare caseloads across the nation. Some refuse to accept the possibility that fewer people on welfare could contribute to a decline in voter registrations at public assistance offices. For example, a 2008 report by Project Vote and Demos rejected any possibility that changes in welfare caseloads could help to explain the decline in public assistance voter registrations.³

Chart 1 plots average AFDC/TANF participation and the average number of voter registrations at state public assistance offices from 1995 to 2006.⁴ The

1. David B. Muhlhausen and Patrick Tyrrell, "Welfare Reform a Factor in Lower Voter Registration at Public Assistance Offices," Heritage Foundation *Center for Data Analysis Report* No. 08–03, June 11, 2008, at <http://www.heritage.org/Research/Welfare/cda08-03.cfm>.
2. R. Michael Alvarez and Jonathan Nagler, "Declining Public Assistance Voter Registration and Welfare Reform: A Response," Demos, October 6, 2009, at http://www.demos.org/pubs/declining_public.pdf (October 8, 2009).



ciated with a 0.49 percent decline in voter registrations at public assistance offices. While research on this topic is new and further analysis is needed, the Heritage report further recommended that Members of Congress, policy-makers, and the media should not dismiss the major role that welfare reform and decreased welfare participation have played in reducing public assistance voter registrations. Regrettably, some still insist that a decrease in welfare caseloads cannot possibly explain some of the decrease in public assistance voter registrations.

A QUICK RESPONSE TO THE DEMOS CRITIQUE

Briefly, Alvarez and Nagler’s argument consists of four criticisms of the analysis in the Heritage paper.

Criticism #1: The Heritage Foundation doubles “their number of observations by arbitrarily dividing the number of public assistance registration applications by two, and assigning half the cycle’s total to each year.”⁵

Under ideal circumstances, Heritage analysts would have used annual voter registration data for their analysis. However, the underlying voter registration data from the federal government are collected and reported in two-year intervals, while the independent variables—including welfare participation rate, income per capita, unemployment rate, population demographics, and election cycles—are measured in single-year intervals. Because the two-year intervals of the registration data do not conform to the independent variables, the original voter registration data were divided evenly between the two years.

For example, Alabama reported 80,096 public assistance voter registrations in 1995–1996. The 80,096 registered voters were distributed equally

decline in voter registrations closely follows the decline in AFDC/TANF participation. While the association between welfare caseloads and voter registrations seems obvious, Heritage analysts tested other factors that might explain the relationship.

To check for other possible explanations for the decline in voter registrations, the Heritage analysts constructed a state-level panel data set of public assistance voter registrations, welfare participation rates, socioeconomic factors, and political election cycles. Using panel regressions, they tested the relative influence of varying AFDC/TANF participation rates on the number of voter registrations while controlling for other factors that might influence registrations.

After controlling for these other factors, Heritage analysts reported a statistically significant association between AFDC/TANF participation and public assistance voter registrations. For example, a 1 percent decrease in AFDC/TANF participation is asso-

3. Douglas R. Hess and Scott Novakowski, “Unequal Access: Neglecting the National Voter Registration Act, 1995–2007,” Project Vote and Demos, February 2008, at http://www.projectvote.org/images/publications/Policy%20Reports%20and%20Guides/Unequal_Access_Final.pdf (October 8, 2009).

4. The Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996 contributed to the decline in public assistance voter registrations. PRWORA replaced Aid to Families with Dependent Children (AFDC) with Temporary Assistance for Needy Families (TANF).

5. Alvarez and Nagler, “Declining Public Assistance Voter Registration and Welfare Reform,” p. 3.

between 1995 and 1996, with 40,048 registrants in each cell. After the allocation, the registrations were divided by the state's population age 18 and over and then multiplied by 100,000. Transforming the registration variable, while imperfect, was done to match the data to the annualized independent variables. Thus, Heritage analysts correctly aligned one-year and two-year variables.

Criticism #2: The Heritage report “only covers at best 5 or 6 election cycles,” which assesses too short of a time period to study the effect of welfare reform on public assistance voter registrations.⁶

Of course, more years of data would be better. However, the Heritage analysis used every year of public assistance voter registration data that was publicly available from the federal government at the time of publication. This time span (1995 to 2006) covers six election cycles. The criticism that Heritage used too few election cycles is odd, considering that Alvarez used *only* four election cycles in previous research on the effect of voter identification laws on voter turnout.⁷

Presumably, Alvarez and Nagler prefer that the relationship between welfare caseload and registration trends go untested until several years down the road, while other organizations make unsubstantiated claims that welfare reform played no role in declining public assistance voter registrations.

Six election cycles cover a long enough period to analyze the relationship between public assistance voter registrations and welfare reform.

Criticism #3: Alvarez and Nagler's primary criticism is that one of the four regression models estimated had a negative coefficient for AFDC/TANF caseloads, thus “an increase in AFDC/TANF recipients would cause a decrease in public assistance registrations.”⁸

Heritage analysts estimated four panel regression models. Each model controlled for AFDC/TANF participation, food stamp participation, WIC (Women, Infants, and Children) participation, income per

capita, unemployment rates, minority population percent, adult population percent, presidential election years, senatorial election years, and off-year election years. Three of the four model specifications (Models 1, 2, and 4) found statistically significant positive associations between AFDC/TANF caseloads and public assistance voter registrations. For these three models, the statistically significant coefficients for AFDC/TANF caseloads ranged from 0.061 to 0.062.⁹

Model 1 analyzed data from 1995 to 2006. In Model 1, AFDC/TANF participation has a statistically significant association with public assistance voter registrations. A one-unit increase in AFDC/TANF participants per 100,000 residents is associated with an increase of 0.062 additional registrations per 100,000 adult residents.

Model 2 presents an analysis of data from 1997 to 2006, because the 1995–1996 public assistance voter registration data may drastically overstate the number of registrations that can reasonably be expected from public assistance offices. During 1995–1996, the debate over welfare reform was at its peak. The political debate likely led opponents of reform to encourage welfare recipients to register to vote in an attempt to influence the policy process. Average state public assistance voter registrations dropped 54 percent, from 115,177 in 1995–1996 to 53,552 in 1997–1998. In terms of raw magnitude, this average decline of 61,625 registrations is the largest drop since the registration data have been collected.

However, research by Demos, the Association of Community Organizations for Reform Now (ACORN), and Project Vote ignores the fact that the largest drop in public assistance voter registrations occurred in 1997–1998 and instead focuses on comparing the initial 1995–1996 reporting period to 2001–2002 and subsequent reporting periods.¹⁰ For Model 2, the finding for AFDC/TANF participation is remarkably similar to the result in Model 1.

6. *Ibid.*, pp. 3–4.

7. R. Michael Alvarez, Delia Bailey, and Jonathan N. Katz, “The Effect of Voter Identification Laws on Turnout,” California Institute of Technology, Division of the Humanities and Social Sciences *Social Science Working Paper* 1267R, October 2007, revised January 2008, at <http://www.hss.caltech.edu/SSPapers/sswp1267R.pdf> (November 10, 2009).

8. Alvarez and Nagler, “Declining Public Assistance Voter Registration and Welfare Reform,” p. 4.

9. Muhlhausen and Tyrrell, “Welfare Reform a Factor in Lower Voter Registration,” p. 5, Table 2.

For Model 3, the regression analyzed data from all years, while individual time-period dummy variables were introduced for the 1997–1998 to 2005–2006 periods. These time-period variables control for differences in reported public assistance voter registrations between the first reporting period (1995–1996) and later reporting periods. The coefficient for AFDC/TANF participation was negative (–0.009), but statistically *insignificant*. Thus, the association between welfare caseloads and public assistance voter registrations in this particular model is statistically indistinguishable from zero.

The regression for Model 4 used the same variables that were used in Model 3, but the data were limited to the years of 1997 to 2006. The coefficient for AFDC/TANF participation is statistically significant, while the time-period dummy variable coefficients were not statistically distinguishable from zero. This result for the time-period dummy variables strongly indicates that the reporting of public assistance voter registrations was unusually high in the 1995–1996 period compared to later reporting periods. Despite the inclusion of time-period fixed effects, the finding for AFDC/TANF participation in Model 4 is remarkably similar to the findings in Models 1 and 2.

Alvarez and Nagler criticize the Heritage report for not overriding the results of Models 1, 2, and 4 with the result of Model 3. Alvarez and Nagler ask, “Why not believe that the estimated coefficient is –.009, suggesting that an increase in AFDC/TANF recipients leads to a *decrease* in public assistance registrations? After all, this coefficient is estimated on *more* data than is the estimate of .062.”¹¹

Regrettably, Alvarez and Nagler are not presenting a clear picture of the analysis presented in the Heritage report. First, Alvarez and Nagler report the AFDC/TANF caseload coefficient in Model 3 as if it is statistically distinguishable from zero, despite this particular coefficient being too imprecise to draw an inference. In referring to the results of Model 3, they report that “an increase in AFDC/

TANF recipients would cause a *decrease* in public assistance registrations.”¹²

Their interpretation is highly misleading. The standard error for this coefficient is so large that the 95 percent confidence interval ranges from –0.067 to 0.049. This coefficient is so imprecise that it indicates that AFDC/TANF caseloads can be associated with an increase or decrease in caseloads. This imprecision is why the coefficient is considered statistically *insignificant*. However, Alvarez and Nagler’s interpretation of the coefficient misleadingly suggests that the finding is statistically significant, meaning that increased AFDC/TANF participation decreases public assistance voter registrations. The Heritage report simply did not find this alleged association.

Further, Alvarez and Nagler assert that Model 3, with the AFDC/TANF coefficient of –0.009, is based on more data than the Models 1 and 2, which report AFDC/TANF coefficients of 0.062. Table 2 of the Heritage report clearly indicates that both Models 1 and 3 are based on 512 observations. However, Alvarez and Nagler would have readers of their report wrongly believe that Model 3 was based on more observations.

Why prefer the results of Model 1? First, two of the other three results for the AFDC/TANF caseload coefficients (Models 2 and 4) support the finding of Model 1. Second, the specification of Model 1 is theoretically superior to the specification of the Model 3 because it more accurately estimates the relationship between election cycles and public assistance voter registrations. A key component in modeling voter registration intensity is to model for election cycles. To capture the influence of election cycles, all the models include dummy variables for presidential, senatorial, gubernatorial, and off-year elections.

The only difference between Models 1 and 3 is that Model 3 includes time-period dummy variables. Used in panel regressions, time-period (fixed-effects) dummy variables control for trends that uni-

10. Hess and Novakowski, “Unequal Access,” and Brian Kavanagh, Lucy Mayo, Steve Carbo, and Mike Slater, “Ten Years Later a Promise Unfulfilled: The National Voter Registration Act in Public Assistance Agencies, 1995–2005,” Demos, Association of Community Organizations for Reform Now, and Project Vote, July 2005, at http://www.issuelab.org/click/download2/ten_years_later_a_promise_unfulfilled_the_national_voter_registration_act_in_public_assistance_agencies_1995_2005/Ten_Years_Later_A_Promised_Unfulfilled.pdf (November 10, 2009).

11. Alvarez and Nagler, “Declining Public Assistance Voter Registration and Welfare Reform,” p. 4 (original emphasis).

12. *Ibid.*

formly affect all of the units of analysis (in this case, the states) over time. However, the time-period dummy variables¹³ used in Models 3 and 4 unartfully and redundantly model election cycles, masking the influence of presidential and gubernatorial elections on public assistance voter registrations. As a result, the presidential and gubernatorial election variables in Models 3 and 4 are statistically insignificant.

Alvarez and Nagler prefer the results of Model 3 that suggest that presidential and gubernatorial election years with their increased political intensity do not influence public assistance voter registrations.

The Heritage analysts were correct to base their findings on the results of Model 1.

Criticism #4: The Heritage analysis incorrectly uses state population weights in panel regressions in which the unit of analysis is the states.¹⁴

Alvarez and Nagler assert that the use of weights “is hard to justify in any sort of multivariate model” and that the use of state population weights “makes little sense in a multivariate model where the unit of analysis is the state.”¹⁵

The panel regressions in the Heritage report were weighted by state adult population because the dependent variable is defined on a per-capita basis (public assistance voter registrations per 100,000 adults in a state). Weighting is particularly important when analyzing differences between

units of analysis based on political jurisdictions (for example, states, cities, and counties).

For example, a one-unit decrease in public assistance voter registrations per 100,000 adult residents in Wyoming is not nearly the same in magnitude as one-unit decline in public assistance voter registrations per 100,000 adults in California. Despite Alvarez and Nagler’s claim that “[t]here is no more reason to weight states by population than there is to weight them by state geographic size,”¹⁶ using the population of the states as weights in panel regressions models of state-level data is a widely accepted practice in the social sciences. A brief search of the social science literature found several studies in the disciplines of criminology, economics, and public policy that use state population weights in state-level panel regressions.¹⁷ Heritage analysts are correct to use population weights in their panel regressions.

Further, panel regression analysis of state data that is weighted for state population allows for national projections. Unwittingly, Alvarez and Nagler use the Heritage report to calculate the net decline of 538,908 in public assistance voter registrations from 1995 to 2006 that can be attributed to the decline in AFDC/TANF caseloads.¹⁸ Such calculations can only be made based on panel regression estimates that use state population weights. Without state population weights, Alvarez and Nagler’s calculations would be meaningless.

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13. In state-level panel data sets, time-period dummy variables usually cover only one year each. However, because the voter registration data were reported only every two years, the Heritage analysis used time-period dummy variables that matched the two-year reporting periods.
 14. Alvarez and Nagler, “Declining Public Assistance Voter Registration and Welfare Reform,” p. 5.
 15. *Ibid.*
 16. *Ibid.*
 17. Leslie V. Gordon and Thomas M. Selden, “How Much Did the Medicaid Expansions for Children Cost? An Analysis of State Medicaid Spending, 1984–1994,” *Medical Care Research and Review*, Vol. 58, No. 4 (December 2001), pp. 482–495; Lawrence Katz, Steven D. Levitt, and Ellen Shustorovich, “Prison Conditions, Capital Punishment, and Deterrence,” *American Law and Economics Review*, Vol. 5, No. 2 (Fall 2003), pp. 318–343; Robert A. Martin and Richard L. Legault, “Systematic Measurement Error with State-Level Crime Data: Evidence from the ‘More Guns, Less Crime’ Debate,” *Journal of Research in Crime and Delinquency*, Vol. 42, No. 2 (May 2005), pp. 187–210; Tomislav V. Kovandzic, Thomas B. Marvell, Lynne M. Vieratis, and Carlisle E. Moody, “When Prisoners Get Out: The Impact of Prison Releases on Homicide rates, 1975–1999,” *Criminal Justice Policy Review*, Vol. 15, No. 2 (June 2004), pp. 212–228; Thomas B. Marvell and Carlisle E. Moody, “The Lethal Effects of Three-Strikes Laws,” *Journal of Legal Studies*, Vol. 30, No. 1 (January 2001), pp. 89–106; Jennifer M. Mellor and Jeffrey Milyo, “State Social Capital and Individual Health Status,” *Journal of Health Politics, Policy, and Law*, Vol. 30, No. 6 (December 2005), pp. 1101–1130; and Steven Raphael and Michael A. Stoll, “The Effect of Prison Releases on Regional Crime Rates,” in William G. Gale and Janet Rothenberg Pack, eds., *Brookings–Wharton Papers on Urban Affairs* (Washington, D.C.: Brookings Institution Press, 2004), pp. 207–255.
 18. Alvarez and Nagler, “Declining Public Assistance Voter Registration and Welfare Reform,” p. 3.

CONCLUSION

The Heritage report found that declining AFDC/TANF caseloads from 1996 to 2006 contributed substantially to the decline in public assistance voter registrations. Despite the criticisms by Alvarez and Nagler, the results still hold. As previously stressed in the Heritage report, further analysis of this research topic is still needed.

However, Members of Congress, policymakers, and the media should not dismiss the major role that welfare reform and decreased AFDC/TANF participation have played in reducing public assistance voter registrations.

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