**STATISTICAL APPENDICES SHOWING ANALYSIS OF RELATIONSHIP BETWEEN MEASURES OF PERSONAL RESPONSIBILITY AND MEASURES OF RED-STATE/BLUE-STATE POLITICS -- Jeffrey Frankel, Sept. 27, 2012**

\*\*\* Thanks to Sarah Cannon and Jesse Schreger for econometric assistance. \*\*\*

**I. The relationship between states’ ratio of Democratic/Republican votes and measures of personal responsibility**

Figure 1a: Federal Taxes Paid minus Spending Received, among Blue vs. Red States   
(Average of votes in 2000, 2004 and 2008 presidential elections)

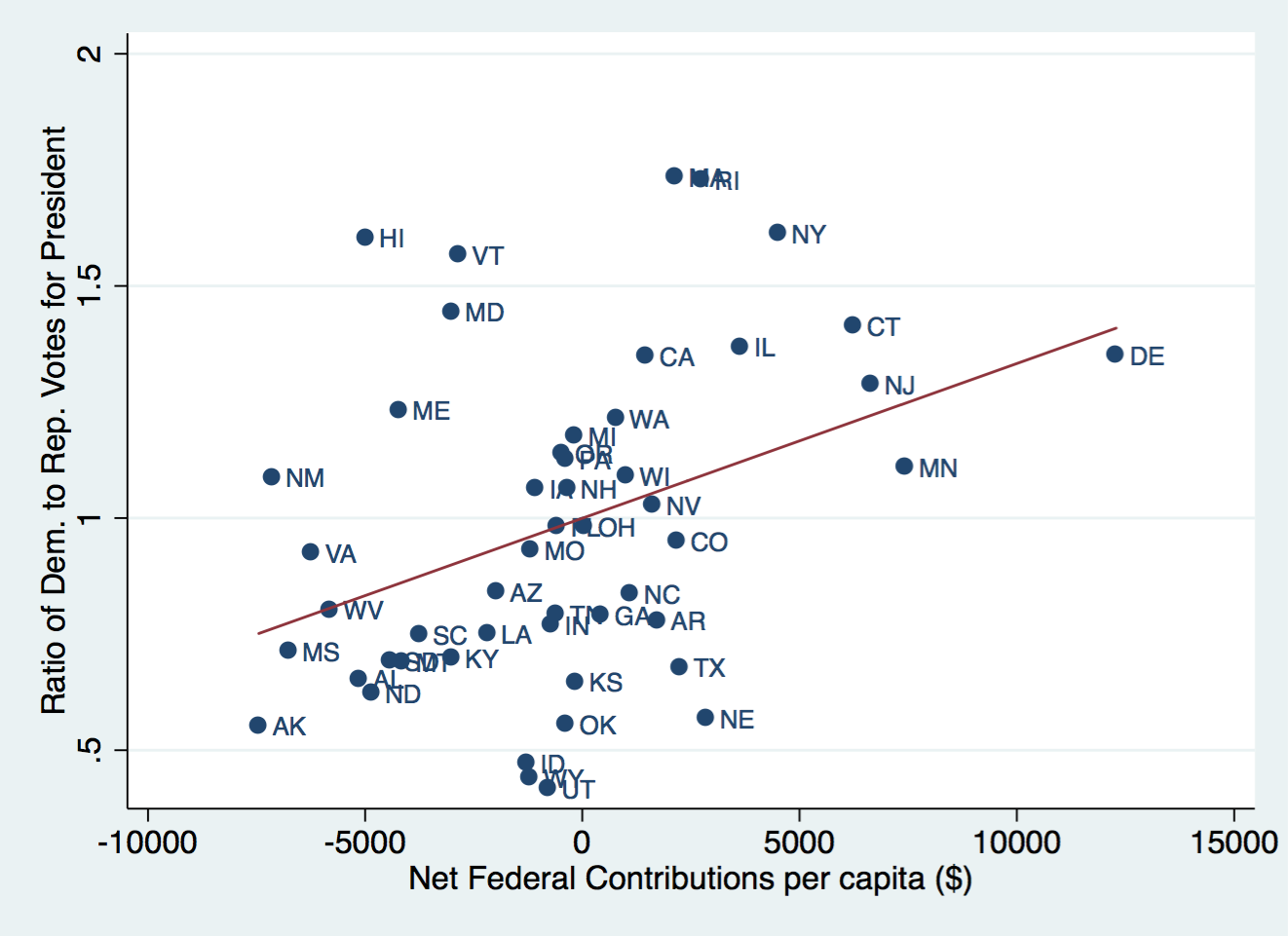


Figure 1b: Federal Taxes Paid minus Spending Received, among Blue vs. Red States (2008 presidential vote)

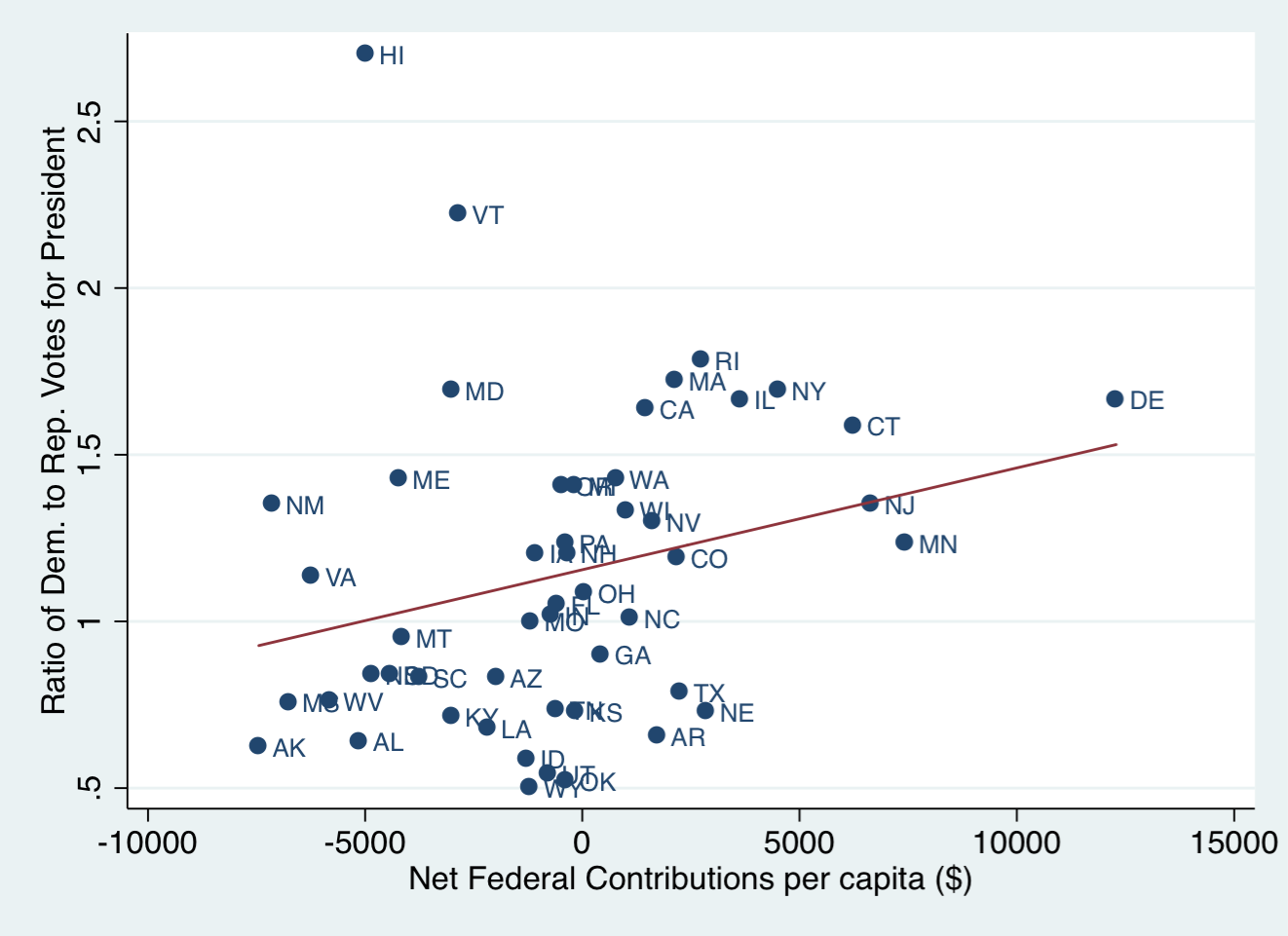


Figure 2a: Obesity (percentage of state population) among Red States and Blue States

(Average of votes in 2000, 2004 and 2008 presidential elections)

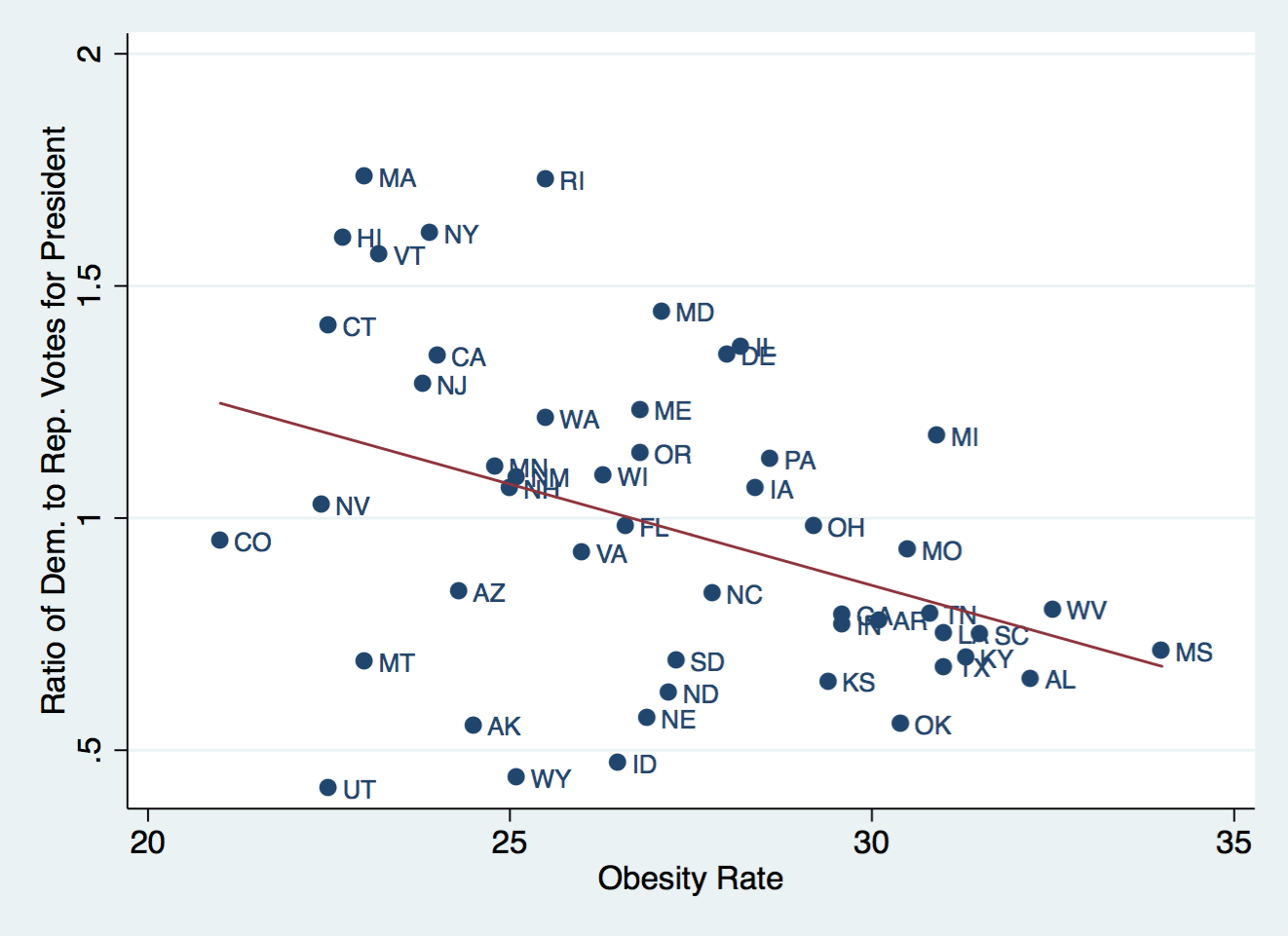


Figure 3a: Teen pregnancy rates (births among girls 15-17 years old) among Blue vs. Red States

(Average of votes in 2000, 2004 and 2008 presidential elections)

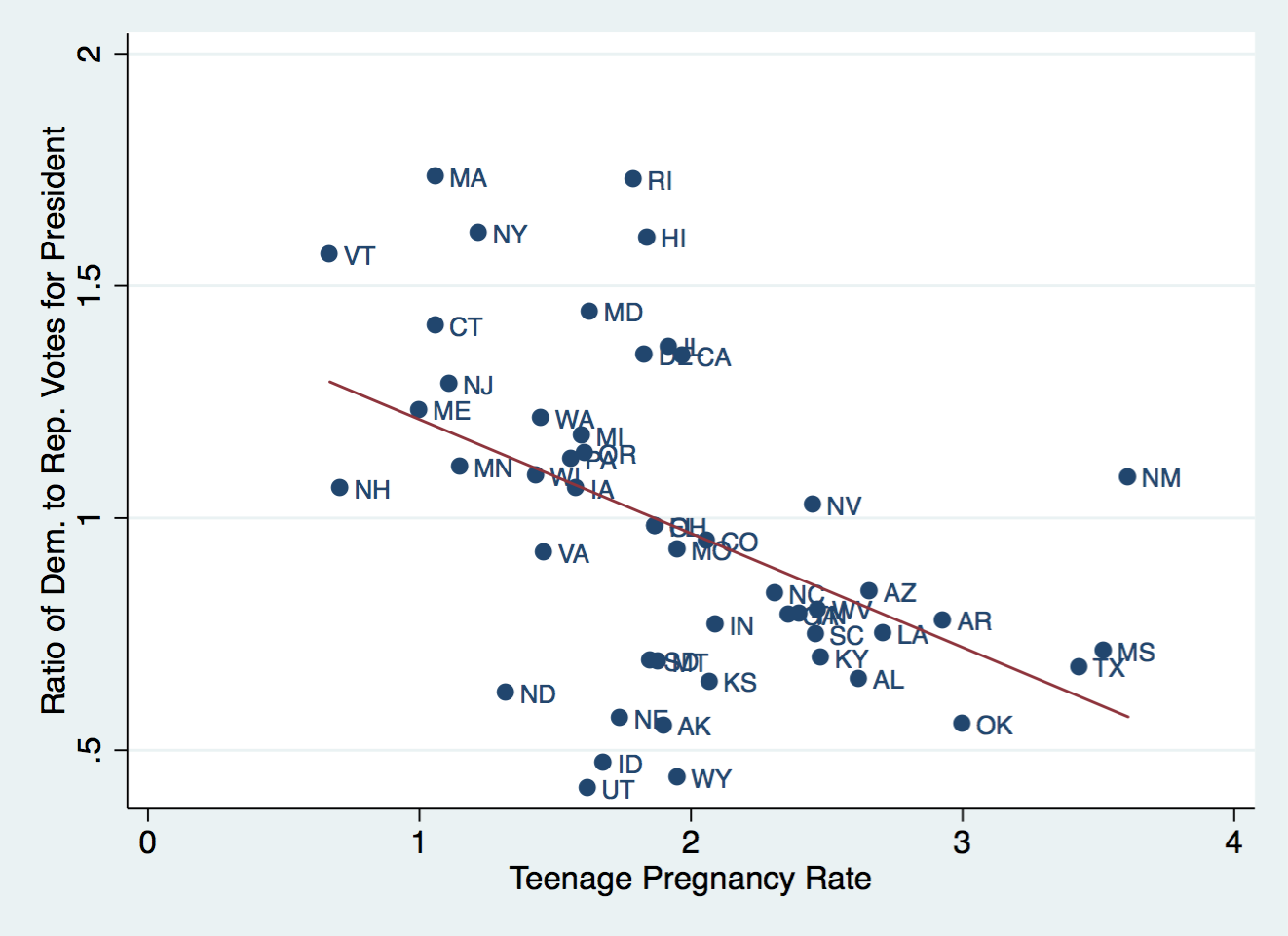


Figure 4a: Chlamydia rates among Blue vs. Red States

(Average of votes in 2000, 2004 and 2008 presidential elections)

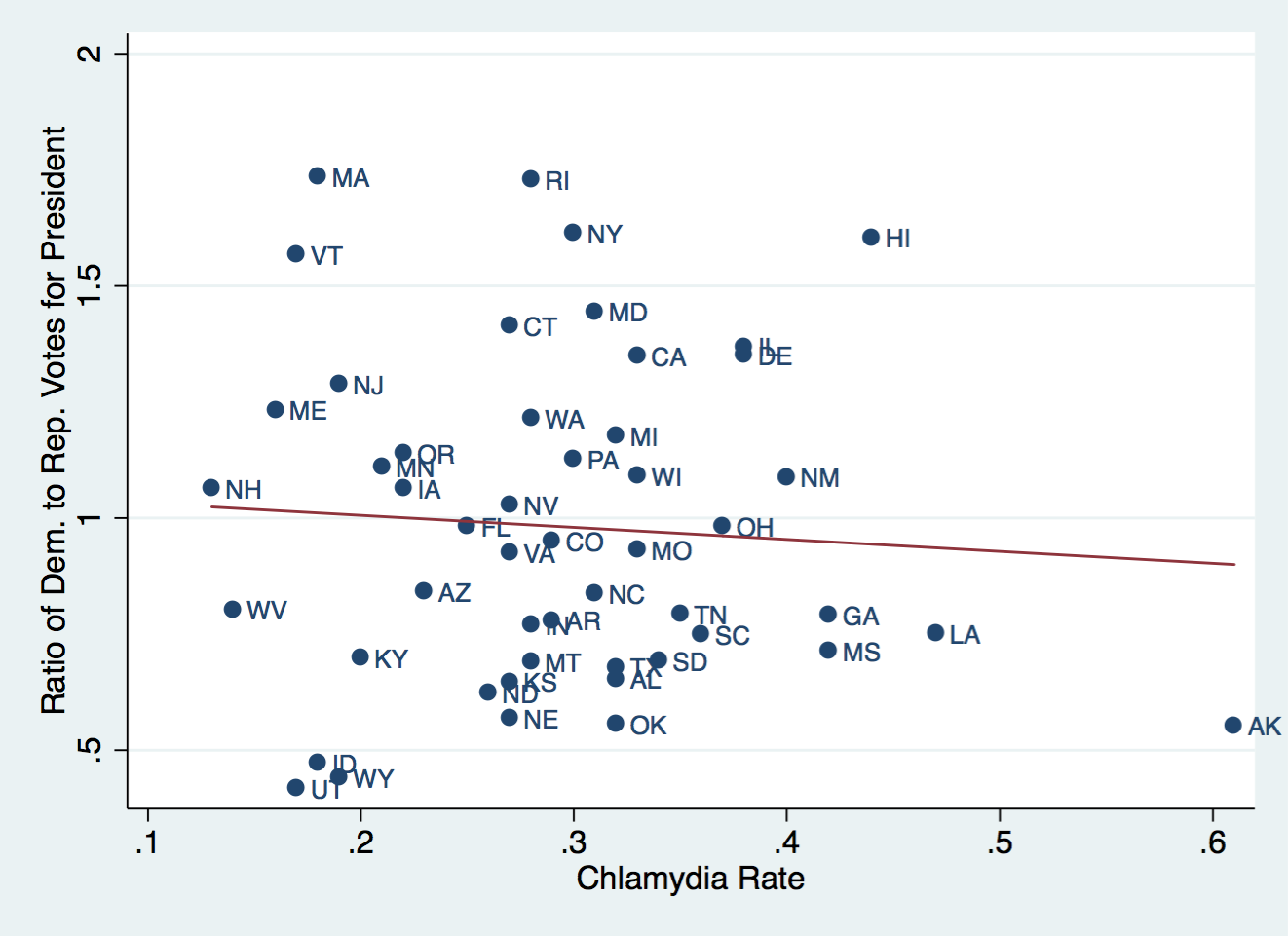


Figure 5a: Smoking (adult rates) among Blue vs. Red States

(Average of votes in 2000, 2004 and 2008 presidential elections)

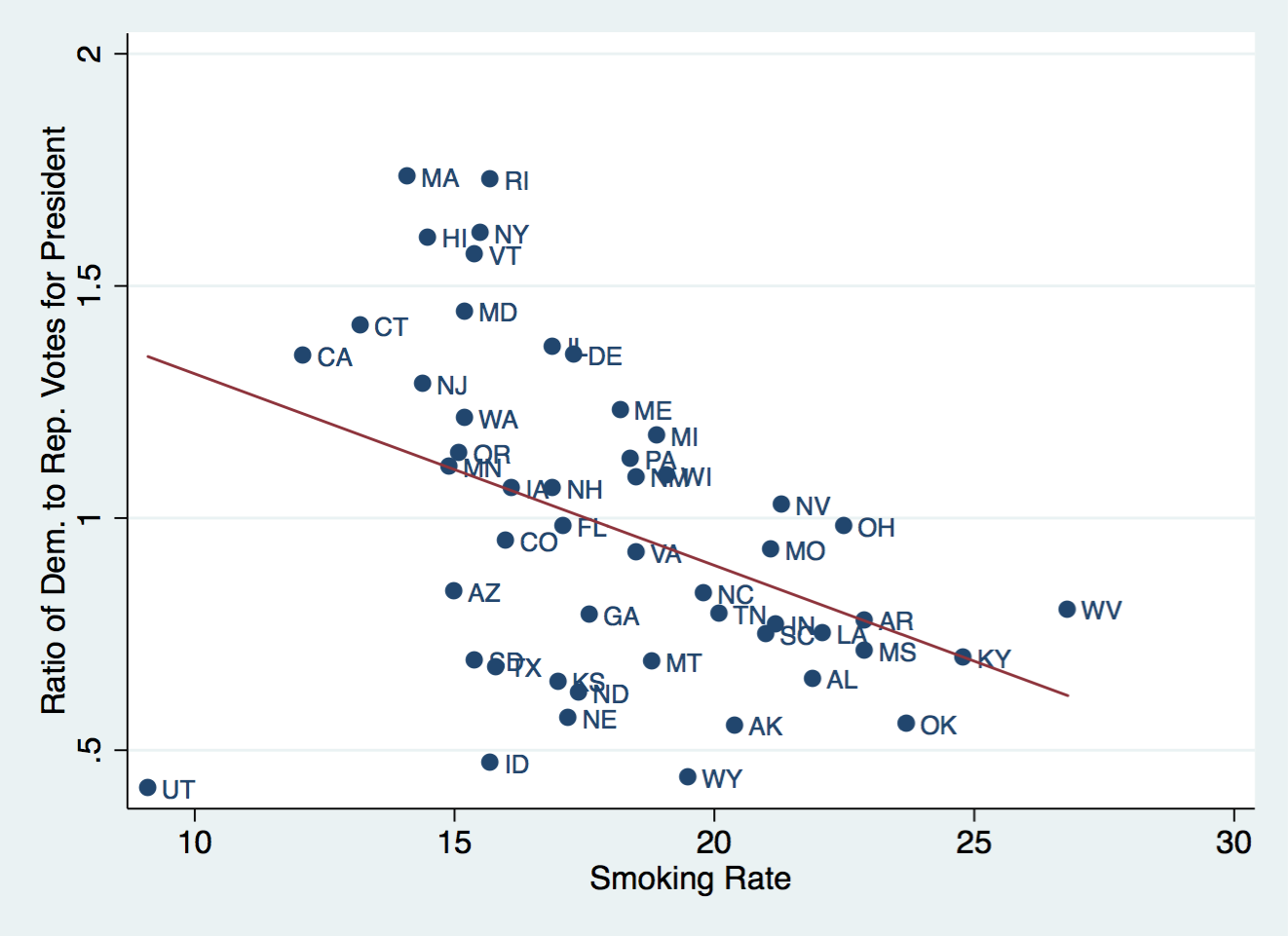


Figure 6a: Drunk driving fatalities among Blue vs. Red States

(Average of votes in 2000, 2004 and 2008 presidential elections)

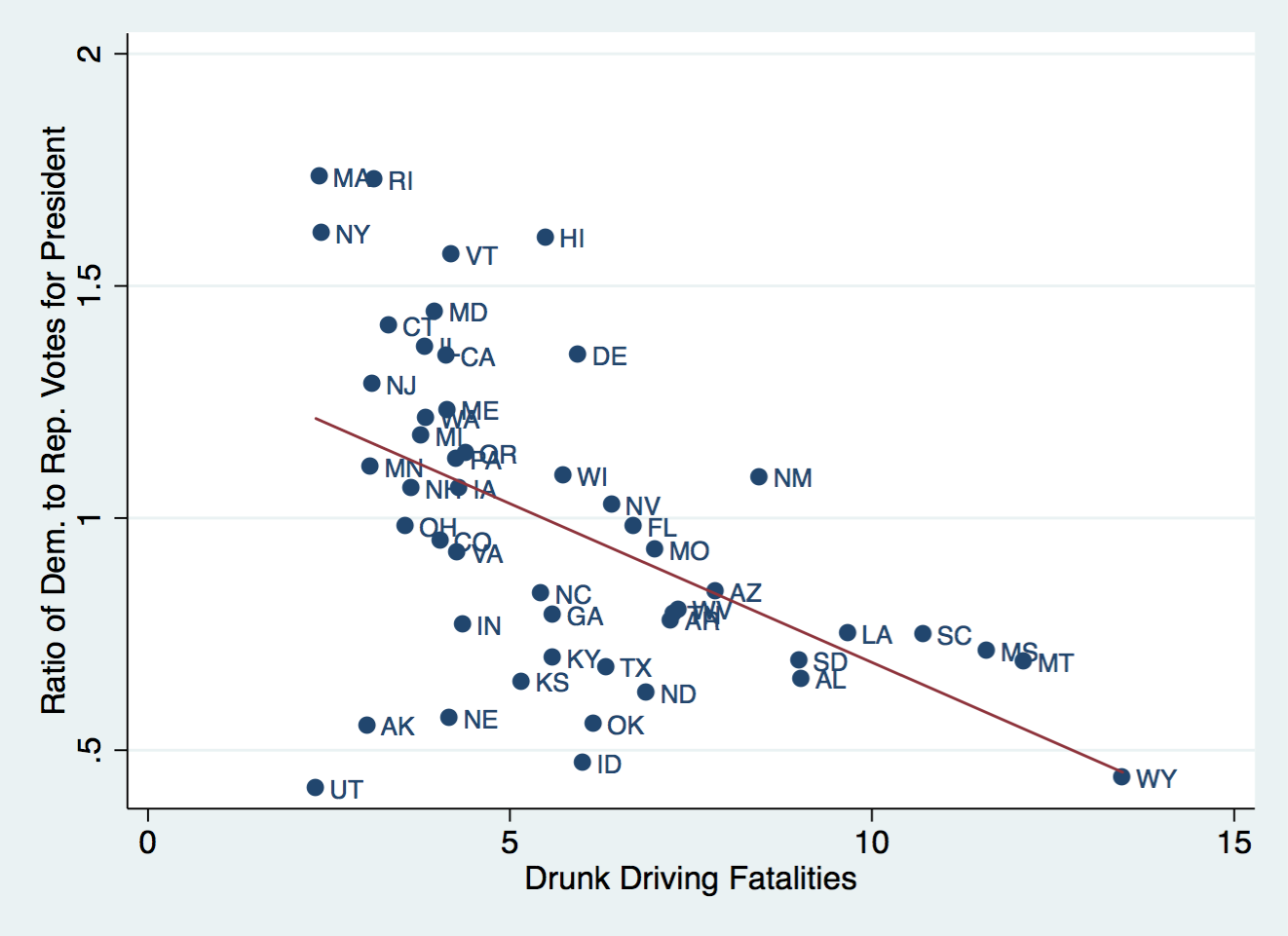


Figure 7a: Firearms assault rates among Blue vs. Red States

(Average of votes in 2000, 2004 and 2008 presidential elections)

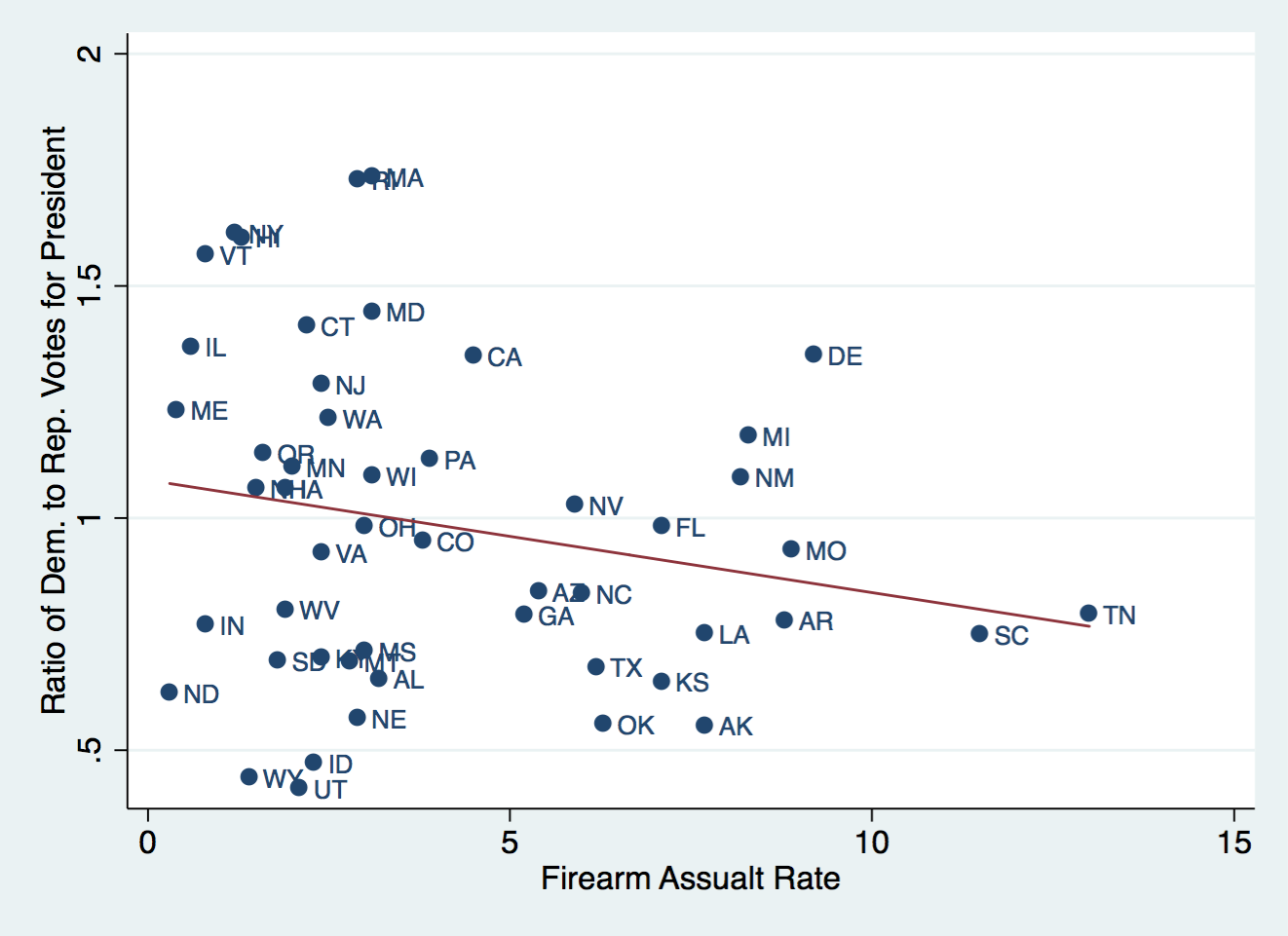
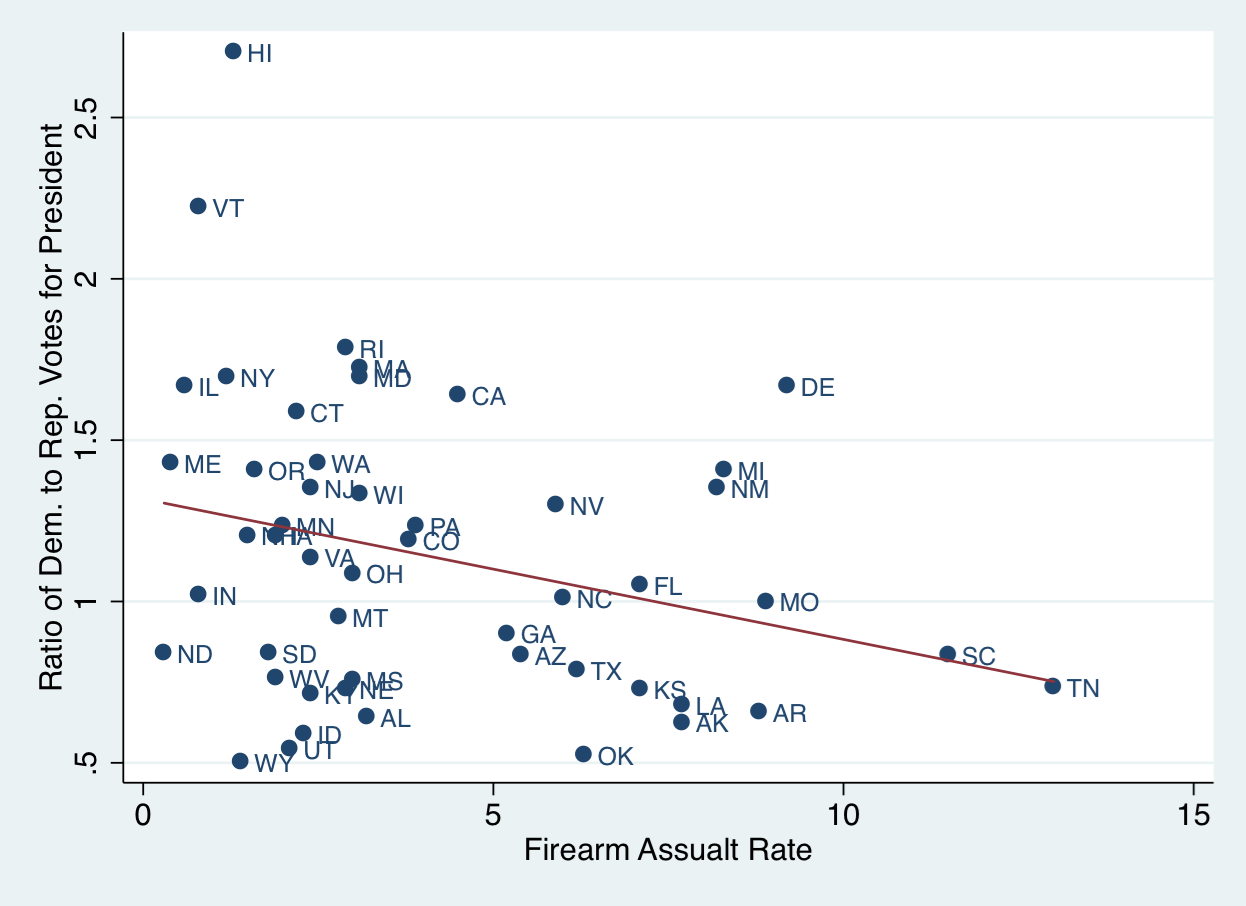


Figure 7b: Firearms assault rates among Blue vs. Red States (2008 presidential vote)



|  |  |  |
| --- | --- | --- |
| Table 1a: Regressions of Democratic/Republican vote ratio  (three-election average: 2000, 2004 & 2008)  against measures of personal responsibility | | |
|  | (1) | (2) |
| VARIABLES | Ratio D/R | RatioD/R\_avg |
|  |  |  |
| Smoking (Adult Rate) |  | -0.0210 |
|  |  | (0.0144) |
| Drunk Driving Deaths |  | -0.0541\*\*\* |
|  |  | (0.0188) |
| Firearms Assault Rate |  | -0.00400 |
|  |  | (0.0150) |
| Obesity Rate | -0.0532\*\*\* |  |
|  | (0.0189) |  |
| Exercise Rate | -0.0118 |  |
|  | (0.0147) |  |
| Constant | 3.333\*\* | 1.684\*\*\* |
|  | (1.526) | (0.228) |
|  |  |  |
| Observations | 50 | 50 |
| R-squared | 0.168 | 0.301 |

\*\*\* p<0.01, \*\* p<0.05, \* p<0.10. (Robust standard effors in parentheses.)

|  |
| --- |
| Table 1b: Regressions of Democratic/Republican vote ratio  (2008 presidential election)  against measures of personal responsibility |

|  |  |  |
| --- | --- | --- |
|  | (1) | (2) |
| VARIABLES | RatioDR2008 | RatioDR2008 |
|  |  |  |
| Smoking (Adult Rate) |  | -0.0382\* |
|  |  | (0.0192) |
| Drunk Driving Deaths |  | -0.0516\*\* |
|  |  | (0.0251) |
| Firearms Assault Rate |  | -0.0179 |
|  |  | (0.0200) |
| ObesityRate | -0.0665\*\*\* |  |
|  | (0.0229) |  |
| Exercise Rate | 0.00336 |  |
|  | (0.0161) |  |
| Constant | 2.682 | 2.194\*\*\* |
|  | (1.657) | (0.304) |
|  |  |  |
| Observations | 50 | 50 |
| R-squared | 0.229 | 0.298 |

Figure 7a: Fitness Index (weighted average of Obesity rate and Exercise rate), among Blue vs. Red States

(Average of votes in 2000, 2004 and 2008 presidential elections)

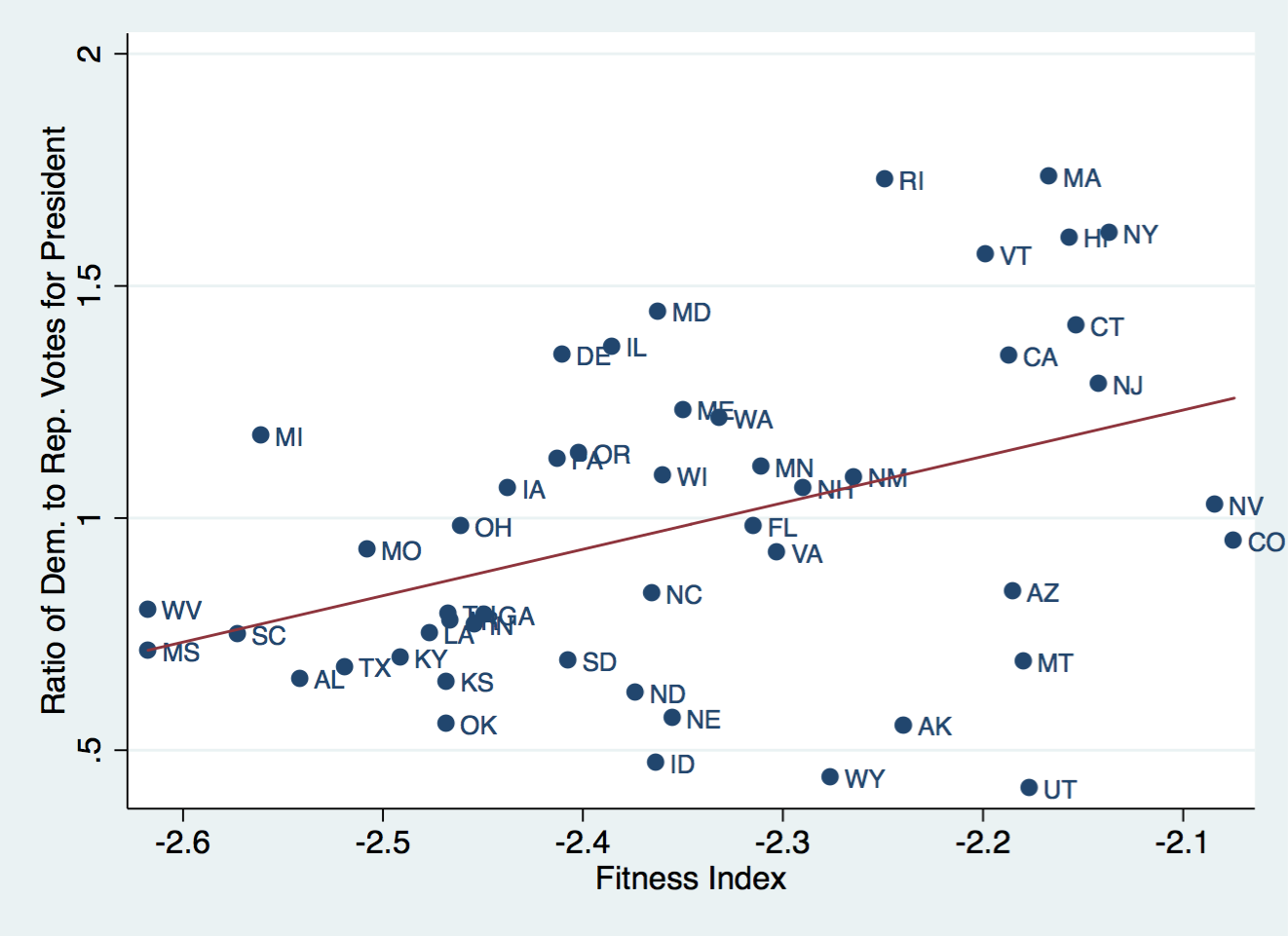


Figure 7b: Fitness Index (weighted average of Obesity rate and Exercise rate), among Blue vs. Red States   
(2008 presidential vote)

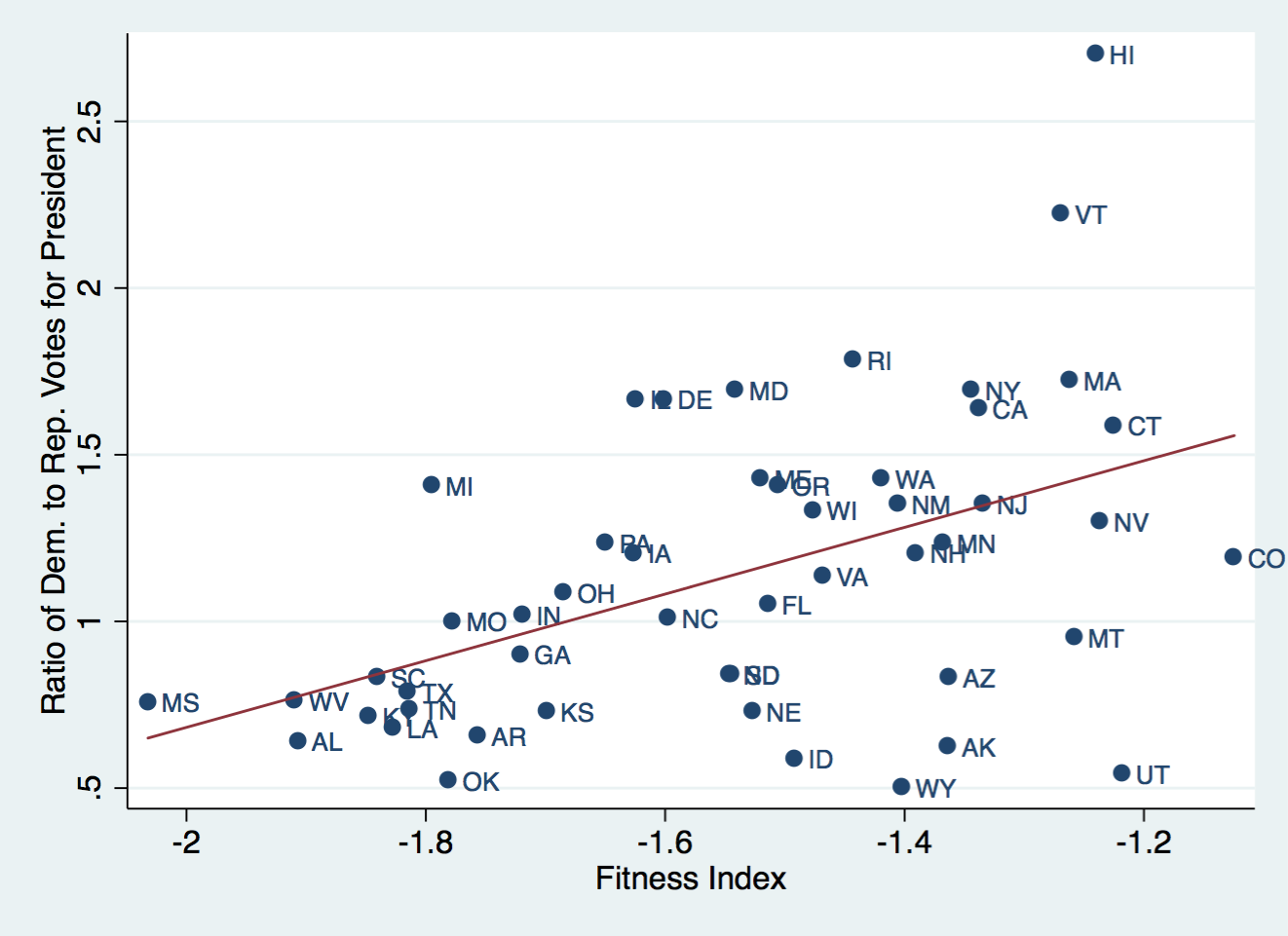


Figure 8a: Hazardous behavior Index (weighted average of smoking, drunk driving fatalities and firearms assaults), among Blue vs. Red States (Average of votes in 2000, 2004 and 2008 presidential elections)

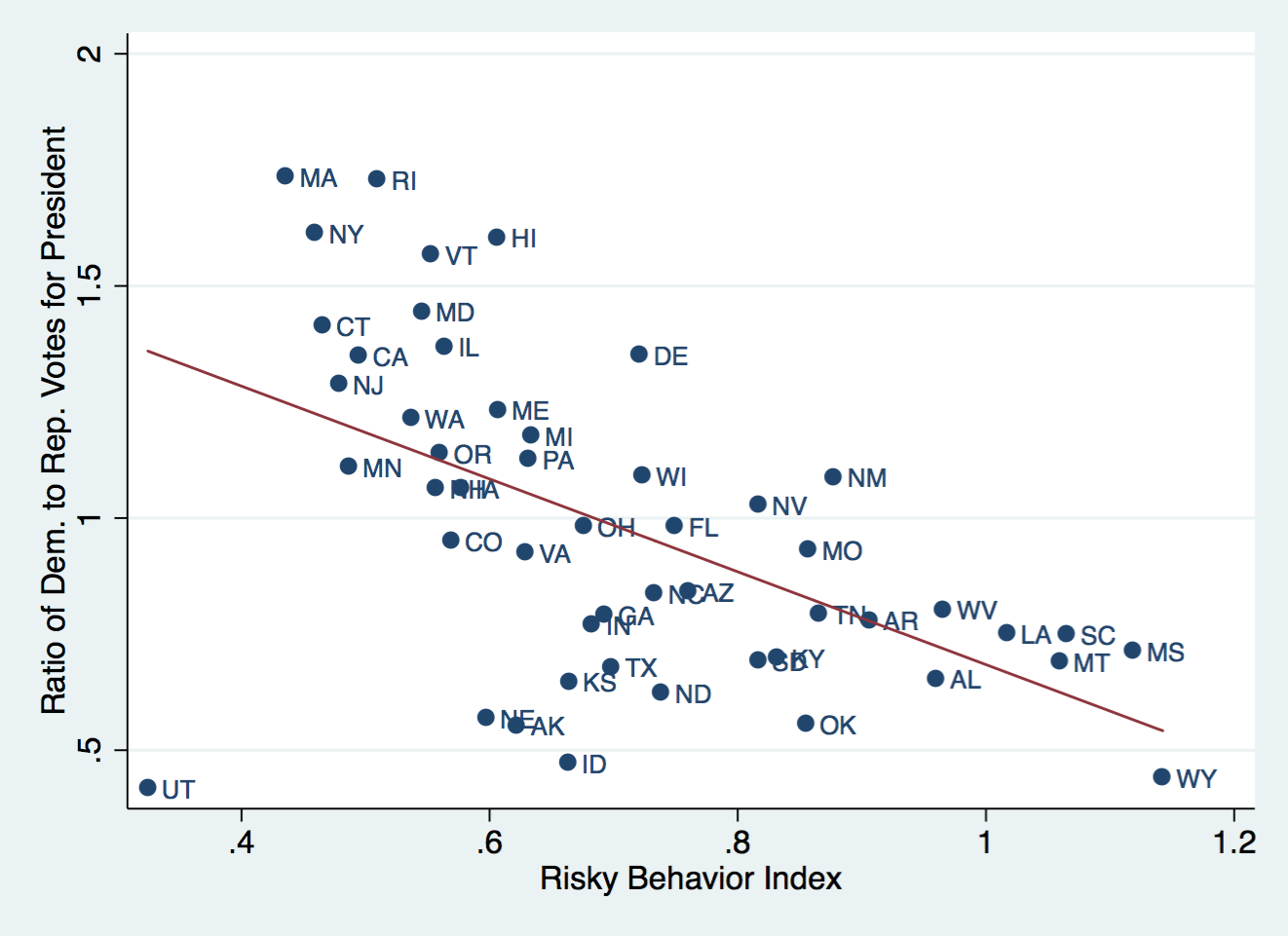
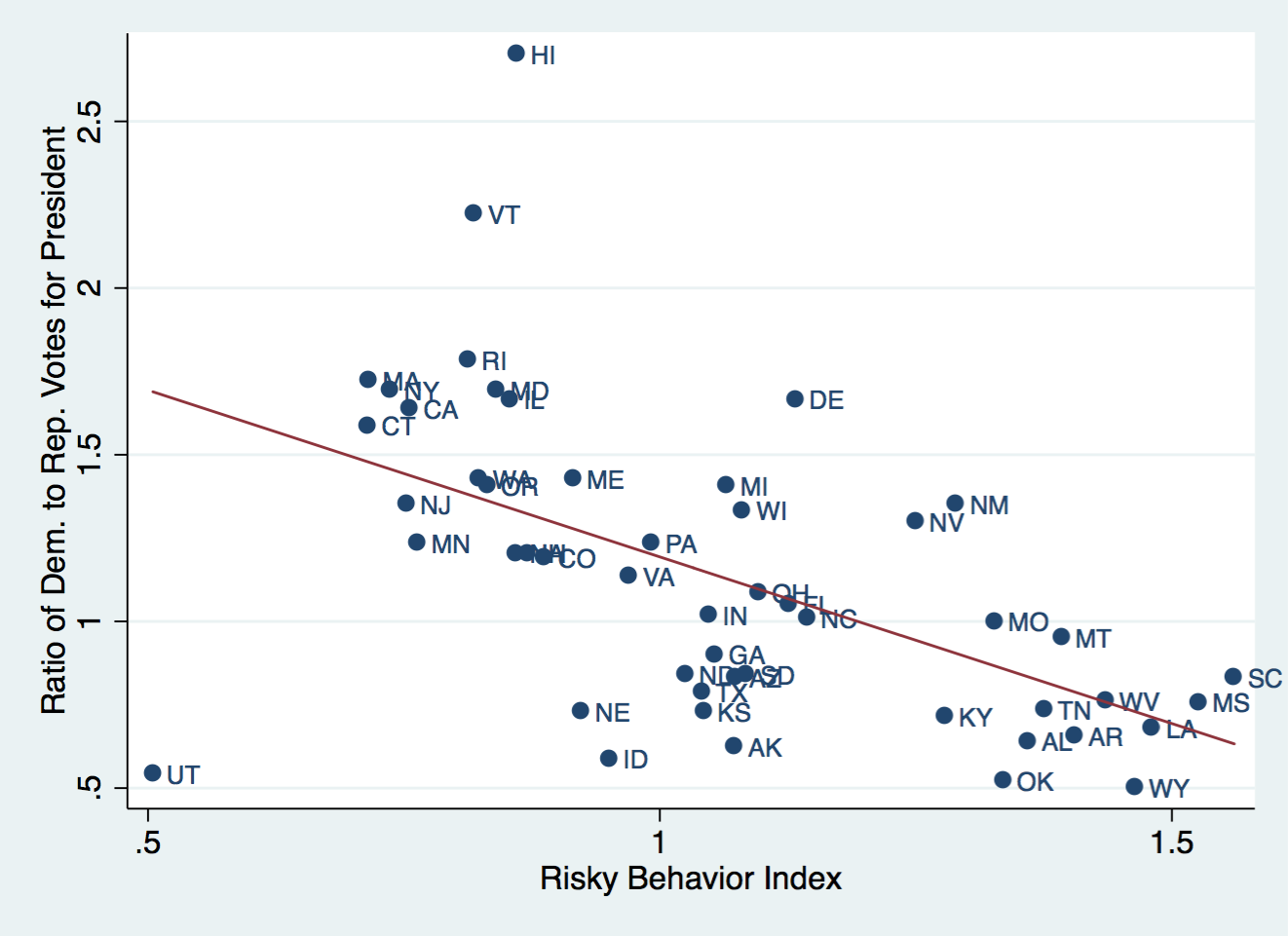


Figure 8b: Hazardous behavior Index (weighted average of smoking, drunk driving fatalities and firearms assaults), among Blue vs. Red States (2008 presidential vote)



|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table 2b: Univariate regressions of Democratic/Republican vote (2008) against measures of personal responsibility | | | | | |
|  | (1) | (2) | (3) | (4) | (5) |
| VARIABLES | RatioDR2008 | RatioDR2008 | RatioDR2008 | RatioDR2008 | RatioDR2008 |
|  |  |  |  |  |  |
| Personal Responsibility Index | 0.0876\*\*\* |  |  |  |  |
|  | (0.0290) |  |  |  |  |
| Obesity Rate |  | -0.0693\*\*\* |  |  |  |
|  |  | (0.0194) |  |  |  |
| Exercise |  |  | 0.0417\*\*\* |  |  |
|  |  |  | (0.0153) |  |  |
| Drunk Driving Fatalities |  |  |  | -0.0811\*\*\* |  |
|  |  |  |  | (0.0166) |  |
| Smoking rate |  |  |  |  | -0.0614\*\*\* |
|  |  |  |  |  | (0.0218) |
| Constant | 1.715\*\*\* | 3.016\*\*\* | -2.082\* | 1.603\*\*\* | 2.241\*\*\* |
|  | (0.220) | (0.563) | (1.148) | (0.131) | (0.432) |
|  |  |  |  |  |  |
| Observations | 50 | 50 | 50 | 50 | 50 |
| R-squared | 0.139 | 0.228 | 0.117 | 0.210 | 0.209 |

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.10

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table 2b, continued: Regressions of Democratic/Republican vote against measures of personal responsibility | | | | | |
|  | (1) | (2) | (3) | (4) | (5) |
| VARIABLES | RatioDR2008 | RatioDR2008 | RatioDR2008 | RatioDR2008 | RatioDR2008 |
|  |  |  |  |  |  |
| Teenage Pregnancy rate (15-17 yr olds.) | -0.328\*\*\* (0.0828) |  |  |  |  |
|  |  |  |  |  |  |
| Chlamydia Rate |  | -0.0334 |  |  |  |
|  |  | (0.916) |  |  |  |
| Firearms Assault Rate |  |  | -0.0435\*\* |  |  |
|  |  |  | (0.0194) |  |  |
| Overall Fitness Index |  |  |  | 0.0704\*\*\* |  |
|  |  |  |  | (0.0198) |  |
| Overall Hazardous Behavior Index |  |  |  |  | -0.185\*\*\* (0.0364) |
|  |  |  |  |  |  |
| Constant | 1.776\*\*\* | 1.149\*\*\* | 1.318\*\*\* | 1.822\*\*\* | 1.777\*\*\* |
|  | (0.175) | (0.262) | (0.120) | (0.234) | (0.154) |
|  |  |  |  |  |  |
| Observations | 50 | 50 | 50 | 50 | 50 |
| R-squared | 0.228 | 0.000 | 0.082 | 0.226 | 0.270 |

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.10

Figure 9a: Overall Personal Responsibility Index among red states and blue states  
(Average of votes in 2000, 2004 & 2008 elections)

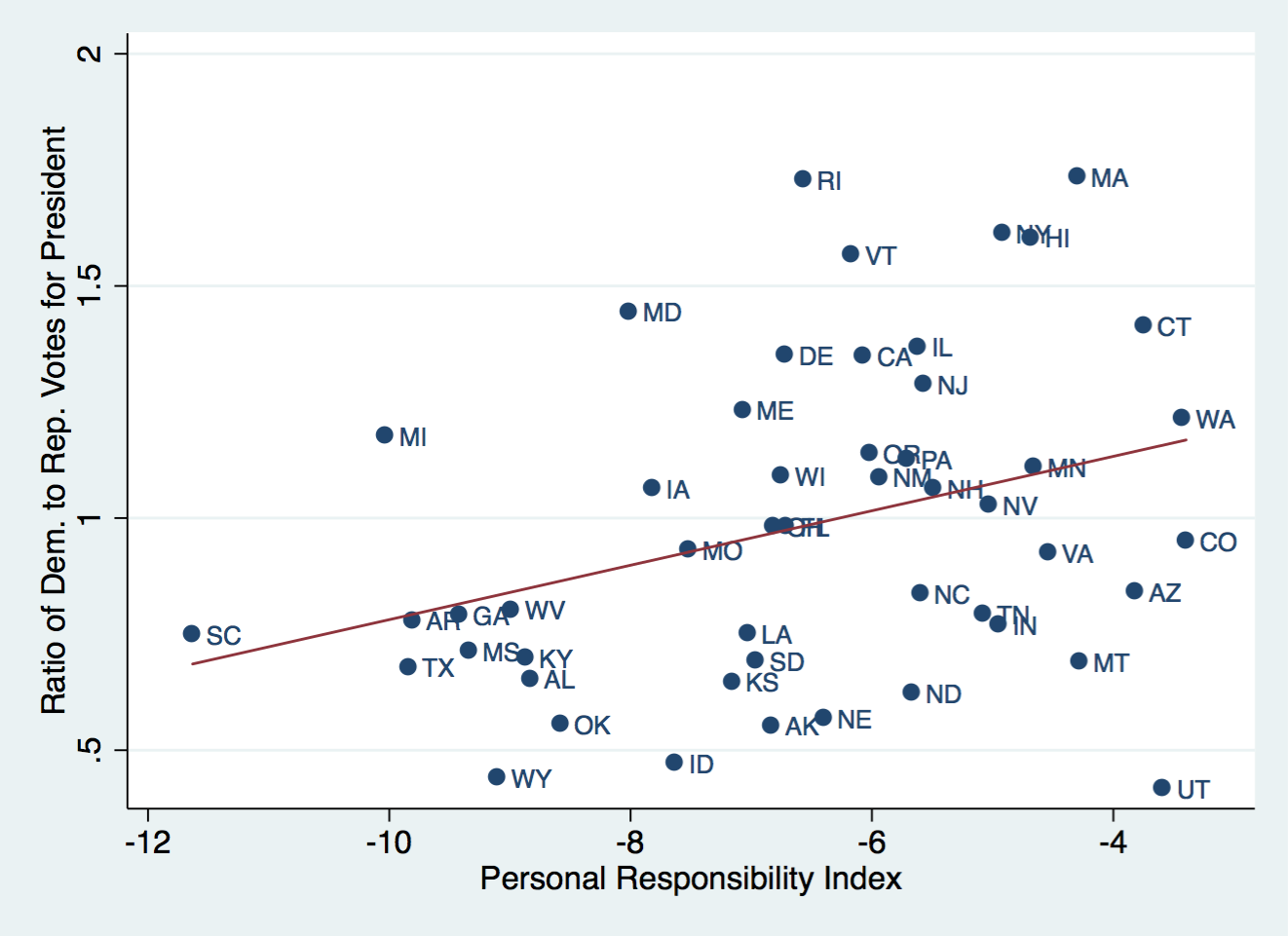


Table 3: Data for the 50 states

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| State | Repub/Dem | Obesity | Exercise | Drunk | Smoking | Teen | Chlamydia | Firearms | Personal |
|  | Vote 2008 |  |  | Driving Fatalities | (adult rate) | Pregnancy | rate | Assault rate | Responsibility  Index |
| Wyoming | 1.99 | 25.1 | 79.8 | 13.46 | 19.5 | 1.95 | 0.19 | 1.4 | -9.1 |
| Oklahoma | 1.91 | 30.4 | 72.2 | 6.16 | 23.7 | 3 | 0.32 | 6.3 | -8.58 |
| Utah | 1.84 | 22.5 | 83.1 | 2.32 | 9.1 | 1.62 | 0.17 | 2.1 | -3.59 |
| Idaho | 1.7 | 26.5 | 80.9 | 6.01 | 15.7 | 1.68 | 0.18 | 2.3 | -7.63 |
| **Alaska** | **1.6** | **24.5** | **79.4** | **3.03** | **20.4** | **1.9** | **0.61** | **7.7** | **-6.83** |
| TOP 5 AVE. | 1.808 | 25.8 | 79.08 | 6.196 | 17.68 | 2.03 | 0.294 | 3.96 | -7.146 |
| **Alabama** | **1.56** | **32.2** | **70.3** | **9.03** | **21.9** | **2.62** | **0.32** | **3.2** | **-8.83** |
| Arkansas | 1.52 | 30.1 | 73.4 | 7.23 | 22.9 | 2.93 | 0.29 | 8.8 | -9.81 |
| Louisiana | 1.47 | 31 | 70.2 | 9.67 | 22.1 | 2.71 | 0.47 | 7.7 | -7.03 |
| Kentucky | 1.4 | 31.3 | 70.1 | 5.6 | 24.8 | 2.48 | 0.2 | 2.4 | -8.87 |
| Kansas | 1.37 | 29.4 | 76.7 | 5.17 | 17 | 2.07 | 0.27 | 7.1 | -7.16 |
| Nebraska | 1.37 | 26.9 | 78.4 | 4.17 | 17.2 | 1.74 | 0.27 | 2.9 | -6.4 |
| Tennessee | 1.36 | 30.8 | 70.3 | 7.26 | 20.1 | 2.4 | 0.35 | 13 | -5.08 |
| **Mississippi** | **1.32** | **34** | **68.6** | **11.59** | **22.9** | **3.52** | **0.42** | **3** | **-9.34** |
| **W.Virginia** | **1.31** | **32.5** | **75.4** | **7.33** | **26.8** | **2.47** | **0.14** | **1.9** | **-8.99** |
| Texas | 1.27 | 31 | 73.8 | 6.33 | 15.8 | 3.43 | 0.32 | 6.2 | -9.84 |
| S.Carolina | 1.2 | 31.5 | 76.1 | 10.71 | 21 | 2.46 | 0.36 | 11.5 | -11.63 |
| Arizona | 1.2 | 24.3 | 75.7 | 7.84 | 15 | 2.66 | 0.23 | 5.4 | -3.82 |
| S.Dakota | 1.19 | 27.3 | 81 | 9 | 15.4 | 1.85 | 0.34 | 1.8 | -6.96 |
| N.Dakota | 1.19 | 27.2 | 78.6 | 6.89 | 17.4 | 1.32 | 0.26 | 0.3 | -5.67 |
| Georgia | 1.11 | 29.6 | 74.2 | 5.6 | 17.6 | 2.36 | 0.42 | 5.2 | -9.42 |
| Montana | 1.05 | 23 | 81.1 | 12.1 | 18.8 | 1.88 | 0.28 | 2.8 | -4.28 |
| Missouri | 1 | 30.5 | 75.1 | 7.01 | 21.1 | 1.95 | 0.33 | 8.9 | -7.52 |
| N.Carolina | 0.99 | 27.8 | 75.2 | 5.44 | 19.8 | 2.31 | 0.31 | 6 | -5.6 |
| Indiana | 0.98 | 29.6 | 74.6 | 4.35 | 21.2 | 2.09 | 0.28 | 0.8 | -4.95 |
| Florida | 0.95 | 26.6 | 76.3 | 6.71 | 17.1 | 1.87 | 0.25 | 7.1 | -6.71 |
| Ohio | 0.92 | 29.2 | 77 | 3.56 | 22.5 | 1.87 | 0.37 | 3 | -6.82 |
| Virginia | 0.88 | 26 | 78 | 4.28 | 18.5 | 1.46 | 0.27 | 2.4 | -4.54 |
| Colorado | 0.84 | 21 | 81.2 | 4.04 | 16 | 2.06 | 0.29 | 3.8 | -3.4 |
| Iowa | 0.83 | 28.4 | 78.6 | 4.3 | 16.1 | 1.58 | 0.22 | 1.9 | -7.82 |
| N.Hampshire | 0.83 | 25 | 81.4 | 3.64 | 16.9 | 0.71 | 0.13 | 1.5 | -5.49 |
| Pennsylvania | 0.81 | 28.6 | 75.6 | 4.26 | 18.4 | 1.56 | 0.3 | 3.9 | -5.71 |
| Minnesota | 0.81 | 24.8 | 84.1 | 3.08 | 14.9 | 1.15 | 0.21 | 2 | -4.66 |
| Nevada | 0.77 | 22.4 | 75.7 | 6.41 | 21.3 | 2.45 | 0.27 | 5.9 | -5.03 |
| Wisconsin | 0.75 | 26.3 | 81.5 | 5.74 | 19.1 | 1.43 | 0.33 | 3.1 | -6.75 |
| New Mexico | 0.74 | 25.1 | 78.8 | 8.45 | 18.5 | 3.61 | 0.4 | 8.2 | -5.94 |
| **New Jersey** | **0.74** | **23.8** | **74.3** | **3.1** | **14.4** | **1.11** | **0.19** | **2.4** | **-5.57** |
| Michigan | 0.71 | 30.9 | 77.8 | 3.78 | 18.9 | 1.6 | 0.32 | 8.3 | -10.03 |
| Oregon | 0.71 | 26.8 | 82.8 | 4.39 | 15.1 | 1.61 | 0.22 | 1.6 | -6.02 |
| Maine | 0.7 | 26.8 | 78.4 | 4.14 | 18.2 | 1 | 0.16 | 0.4 | -7.07 |
| Washington | 0.7 | 25.5 | 82.7 | 3.85 | 15.2 | 1.45 | 0.28 | 2.5 | -3.43 |
| **Connecticut** | **0.63** | **22.5** | **81.1** | **3.33** | **13.2** | **1.06** | **0.27** | **2.2** | **-3.75** |
| California | 0.61 | 24 | 77.2 | 4.13 | 12.1 | 1.97 | 0.33 | 4.5 | -6.07 |
| **Illinois** | **0.6** | **28.2** | **75.1** | **3.83** | **16.9** | **1.92** | **0.38** | **0.6** | **-5.62** |
| **Delaware** | **0.6** | **28** | **78.1** | **5.95** | **17.3** | **1.83** | **0.38** | **9.2** | **-6.72** |
| Maryland | 0.59 | 27.1 | 78.1 | 3.97 | 15.2 | 1.63 | 0.31 | 3.1 | -8.01 |
| New York | 0.59 | 23.9 | 73.4 | 2.4 | 15.5 | 1.22 | 0.3 | 1.2 | -4.92 |
| Massachusetts | 0.58 | 23 | 80 | 2.37 | 14.1 | 1.06 | 0.18 | 3.1 | -4.3 |
| **Rhode Island** | **0.56** | **25.5** | **75.7** | **3.13** | **15.7** | **1.79** | **0.28** | **2.9** | **-6.57** |
| Vermont | 0.45 | 23.2 | 81.8 | 4.2 | 15.4 | 0.67 | 0.17 | 0.8 | -6.17 |
| Hawaii | 0.37 | 22.7 | 80.5 | 5.5 | 14.5 | 1.84 | 0.44 | 1.3 | -4.68 |
| LAST 5 AVE. | 0.51 | 23.66 | 78.28 | 3.52 | 15.04 | 1.316 | 0.274 | 1.86 | -5.328 |

**Data sources**

Teenage pregnancy (15-17), 2009

Birth rate per 1,000 women in specified age group (divided by 10 to get % terms). Source: CDC.

Data Brief 58: U.S. birth rates for teenagers aged 15-17 and 18-19 by state, 2007 and 2009. Birth rate per 1,000 women in specified age group. [By place of residence. Data for 2009 are based on a continuous file of records received from the states.]

Chlamydia

Number of Reported Chlamydia Cases per 100,000 Population, 2003 (divided by 1,000 to get % rate)

SOURCE: [statehealthfacts.org](http://www.statehealthfacts.org/cgi-bin/healthfacts.cgi?action=compare&category=Health+Status&subcategory=Sexually+Transmitted+Diseases&topic=Chlamydia+Rate) http://www.statemaster.com/graph/hea\_chl\_rat-health-chlamydia-rate

Shootings

Gun crime in the US, 2010. Firearms assaults per 100,000 population (divided by 1,000 to get rate)

Source: FBI, http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2010/crime-in-the-u.s.-2010

Source article: http://www.guardian.co.uk/news/datablog/2011/jan/10/gun-crime-us-state#data

drunk driving fatalities

NHSTA data, Department of Transportation

Thanks to Sarah Cannon and Jesse Schreger for econometric assistance.

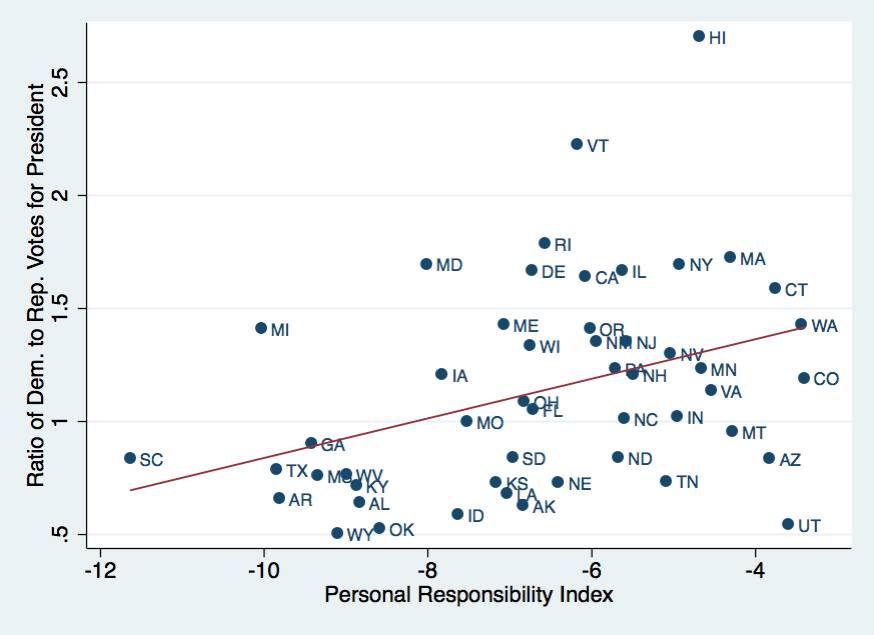
Construction of composite indices:

Fitness index = [exercise - 5x(obesity)]/6.

Index of risky behavior   
= (firearms assaults +5.0 drunk driving deaths + 8.0 teenage pregnancy)/ 14.0

Overall Index of personal responsibility   
= average of fitness index and (-) risky behavior index.

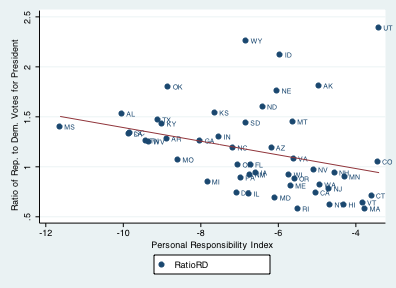
Figure9b: Personal Responsibility Index & Democratic/Republican ratio (2008 election)



**Appendix II: The relationship between states’ Ratio of Republican to Democrat votes and measures of personal responsibility**

**Figure 9c: Personal Responsibility Index**

(averaging voting rates from 2000, 2004 and 2008 elections)



This is relationship is statistically significant at the 97% confidence level (3.0 % significance level).

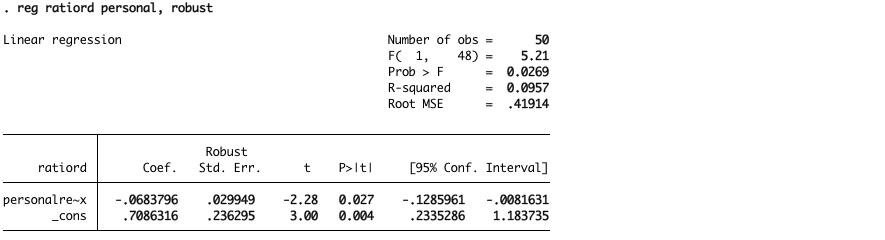
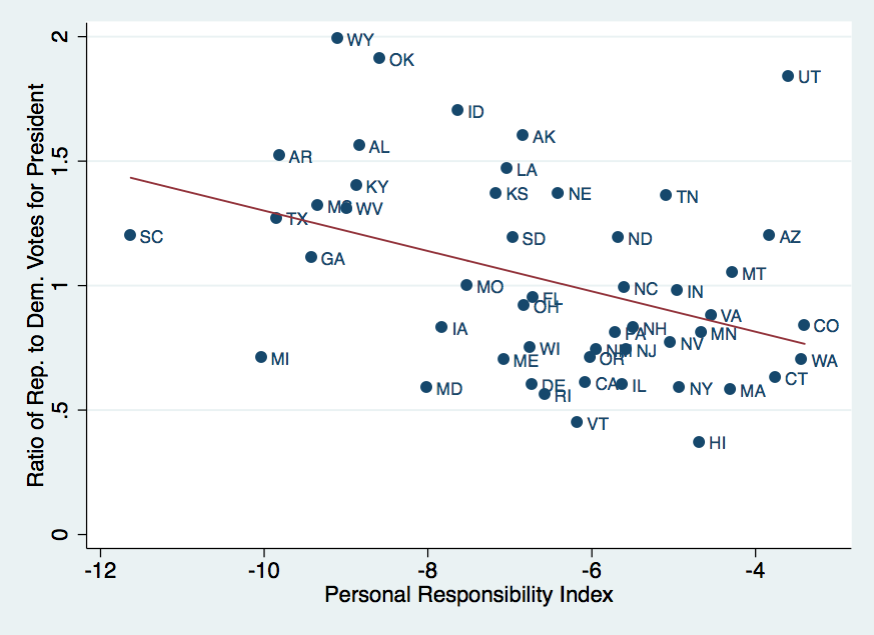
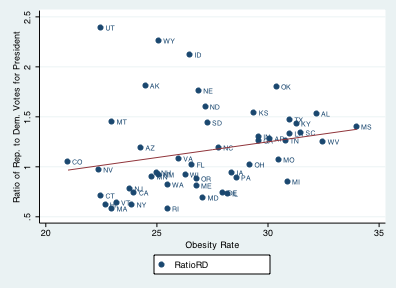


Figure 9d: Personal Responsibility Index Republican/Democratic ratio (2008 election)



**Obesity**

Figure 2c: Obesity1 and Republican vs. Democrat Popular Votes (2000, 2004, 2008 Elections)



1 Source: CDC, http://www.cdc.gov/obesity/data/trends.html#State

This is a statistically significant relationship, at the 90 % confidence (10 % significance) level.

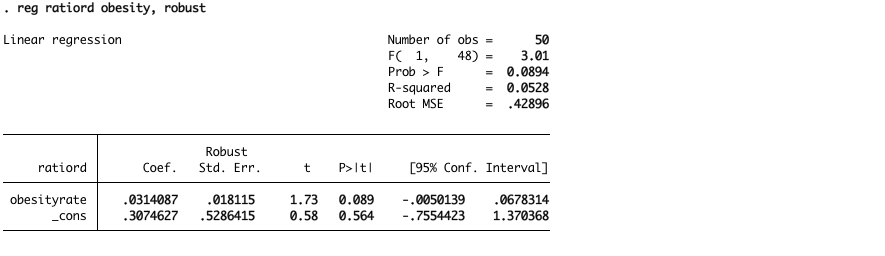
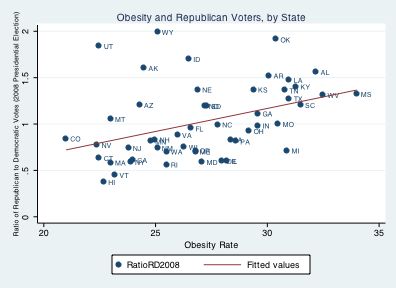


Figure 2d: Obesity1 and Republican vs. Democrat Popular Votes (2008 Election)



1 Source: CDC, http://www.cdc.gov/obesity/data/trends.html#State

This is a statistically significant relationship, at the 99.9 % confidence (0.1 % significance) level.

The relationship is significant at the 0.1% level. (Includes Washington, DC)

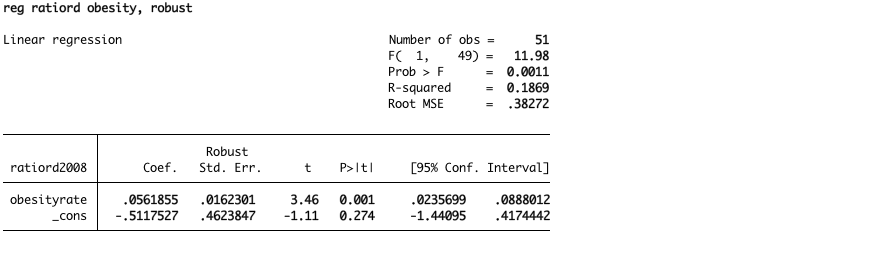
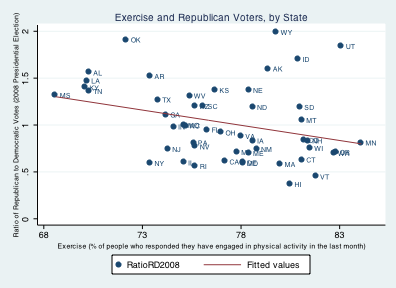


Figure 10d: Physical Exercise and Republican Voters (2008 election)



Note: CDC statistics on exercise pertain to 2004 (except for Hawaii, which pertains to 2005).

This relationship is statistically significant at the 97% confidence (3% significance) level.

Regression of Republican/Democratic voters against exercise is statistically significant.

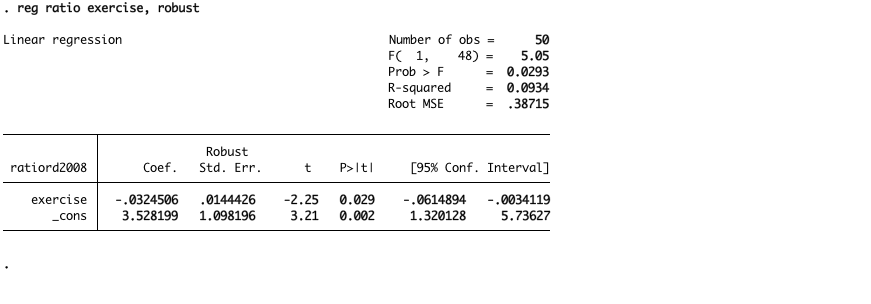
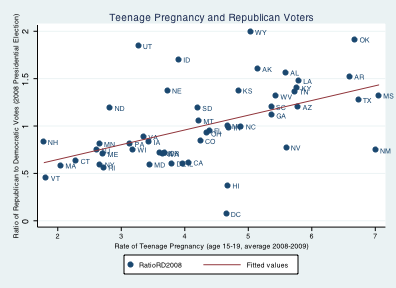
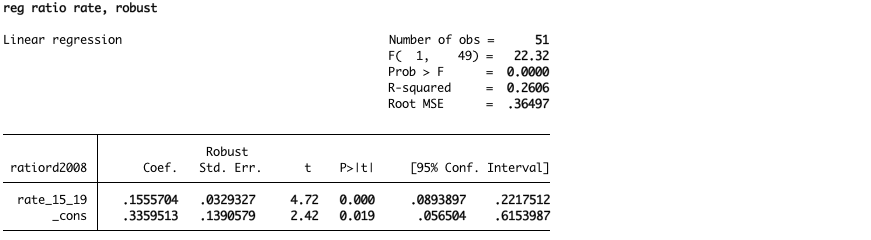


Figure 3d: Teenage Pregnancy2  and Republican/Democrat Popular Votes (2008 Election)



2 Source: CDC, Birth rates for teenagers aged 15-19 by state, annual average for 2007-2009. <http://www.cdc.gov/obesity/data/trends.html#State> (downloaded May 10, 2012)  
  
This relationship is statistically significant at the 99.9 level of confidence (0.1 level of significance).



|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table 2d: Univariate regressions of Republican/Democratic vote (2008) against measures of personal responsibility | | | | | |
|  | (1) | (2) | (3) | (4) | (5) |
| VARIABLES | RatioRD2008 | RatioRD2008 | RatioRD2008 | RatioRD2008 | RatioRD2008 |
|  |  |  |  |  |  |
| Personal Responsibility Index | -0.0811\*\*\* |  |  |  |  |
|  | (0.0286) |  |  |  |  |
| ObesityRate |  | 0.0497\*\*\* |  |  |  |
|  |  | (0.0157) |  |  |  |
| Exercise |  |  | -0.0325\*\* |  |  |
|  |  |  | (0.0144) |  |  |
| DrunkDriving |  |  |  | 0.0737\*\*\* |  |
|  |  |  |  | (0.0203) |  |
| SmokingAdultRate |  |  |  |  | 0.0461\*\* |
|  |  |  |  |  | (0.0221) |
| Constant | 0.490\*\* | -0.322 | 3.528\*\*\* | 0.602\*\*\* | 0.196 |
|  | (0.194) | (0.448) | (1.098) | (0.134) | (0.420) |
|  |  |  |  |  |  |
| Observations | 50 | 50 | 50 | 50 | 50 |
| R-squared | 0.158 | 0.155 | 0.093 | 0.229 | 0.156 |

\*\*\* p<0.01, \*\* p<0.05, \* p<0.10 Robust standard errors in parentheses

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table 2d: Regressions of Republican/Democratic vote against measures of personal responsibility, continued | | | | | |
|  | (1) | (2) | (3) | (4) | (5) |
| VARIABLES | RatioRD2008 | RatioRD2008 | RatioRD2008 | RatioRD2008 | RatioRD2008 |
|  |  |  |  |  |  |
| Teenage Pregnancy | 0.282\*\*\* |  |  |  |  |
|  | (0.0757) |  |  |  |  |
| ChlamydiaRate |  | 0.147 |  |  |  |
|  |  | (0.745) |  |  |  |
| FirearmAssaultRate |  |  | 0.0294\* |  |  |
|  |  |  | (0.0165) |  |  |
| FitnessIndex |  |  |  | -0.0511\*\*\* |  |
|  |  |  |  | (0.0166) |  |
| RiskyBehaviorIndex |  |  |  |  | 0.162\*\*\* |
|  |  |  |  |  | (0.0395) |
| Constant | 0.476\*\*\* | 0.981\*\*\* | 0.902\*\*\* | 0.527\*\*\* | 0.466\*\*\* |
|  | (0.145) | (0.229) | (0.0957) | (0.189) | (0.145) |
|  |  |  |  |  |  |
| Observations | 50 | 50 | 50 | 50 | 50 |
| R-squared | 0.223 | 0.001 | 0.050 | 0.158 | 0.272 |

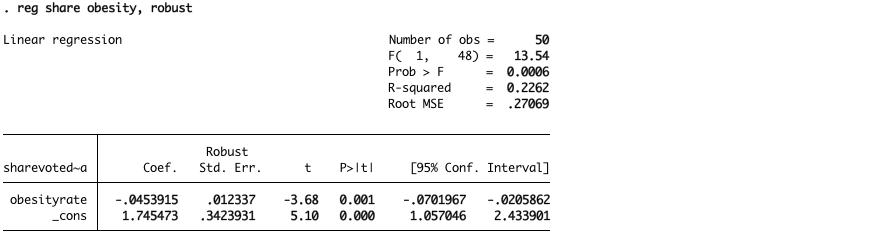
\*\*\* p<0.01, \*\* p<0.05, \* p<0.10 Robust standard errors in parentheses

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**Appendix III: The relationship between states’ votes on Obamacare and measures of personal responsibility**

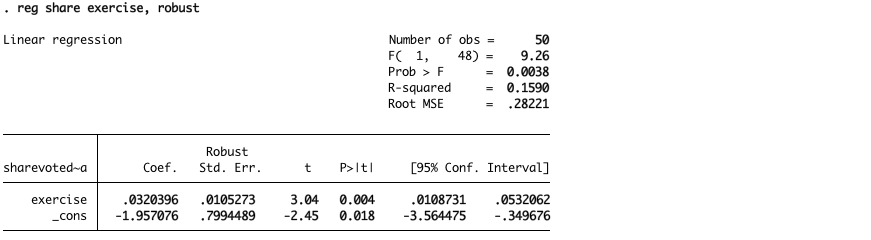
|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Congressional vote:  Six states with highest share voting for Obamacare  (Affordable Care Act) | | State’s **ranking** in measures of risky behavior vs. personal responsibility | | | | | | | |
| Obesity | Lack of exer-cise | Teen-age preg-nancy | Chla-mydia | Drunk  Driving | Smo-king | Shoot-ings (firearm assaults) | Average of rank-ings |
| Vermont | VT | 43 | 46 | 50 | 47 | 32 | 39 | 47 | 43.4 |
| Connecticut | CT | 48 | 42 | 46 | 34 | 43 | 48 | 35 | 42.3 |
| Rhode I. | RI | 33 | 18 | 30 | 28 | 44 | 36 | 28 | 31.0 |
| Hawaii | HI | 46 | 38 | 28 | 3 | 24 | 45 | 44 | 32.6 |
| N.Dakota | ND | 23 | 33 | 42 | 35 | 14 | 25 | 50 | 31.7 |
| Mass. | MA | 45 | 37 | 46 | 45 | 49 | 47 | 24 | 41.9 |
| Average | | 39.7 | 35.7 | 40.3 | 32.0 | 34.3 | 40 | 38 | 37.15 |
| Six states with lowest votes for Obamacare | |  |  |  |  |  |  |  |  |
| Louisiana | LA | 6 | 3 | 6 | 2 | 5 | 7 | 8 | 5.3 |
| Wyoming | WY | 34 | 36 | 21 | 42 | 1 | 16 | 43 | 27.6 |
| Idaho | ID | 29 | 39 | 32 | 44 | 19 | 35 | 34 | 33.1 |
| Oklahoma | OK | 11 | 6 | 4 | 17 | 18 | 3 | 12 | 10.1 |
| Utah | UT | 47 | 49 | 34 | 46 | 50 | 50 | 36 | 44.6 |
| Alabama | AL | 3 | 5 | 8 | 18 | 6 | 8 | 21 | 9.9 |
| Average | | 21.7 | 23.0 | 17.5 | 28.2 | 16.5 | 19.8 | 25.7 | 21.77 |

Obesity



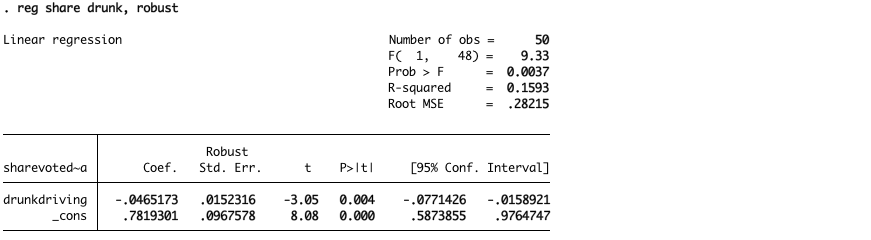
This relationship is statistically significant at the 99.9 % confidence level (0.1 % significance).

Exercise



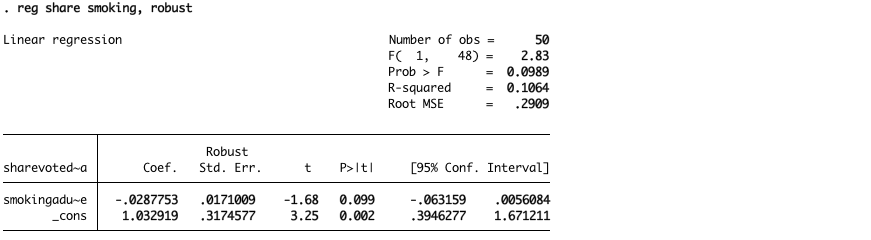
This relationship is statistically significant at the 99.5 % confidence level (0.5 % significance).

Drunk Driving



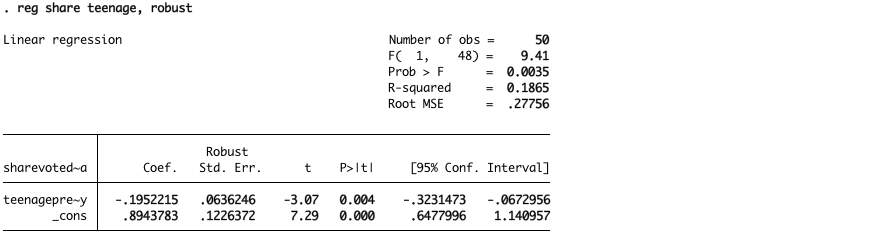
This relationship is statistically significant at the 99.5 % confidence level (0.5 % significance).

Smoking



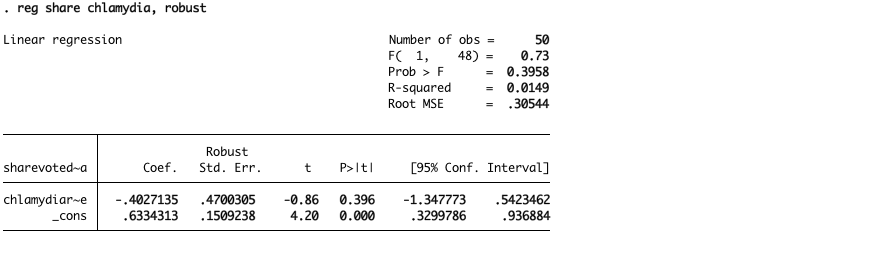
This relationship is statistically significant at the 90 % confidence level (10 % significance).

Teenage Pregnancy (15-17)



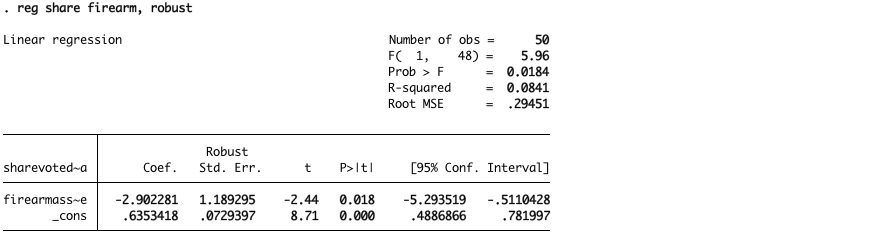
This relationship is statistically significant at the 99.5 % confidence level (0.5 % significance).

Chlamydia



This relationship is not statistically significant at conventional confidence levels..

Firearm assaults



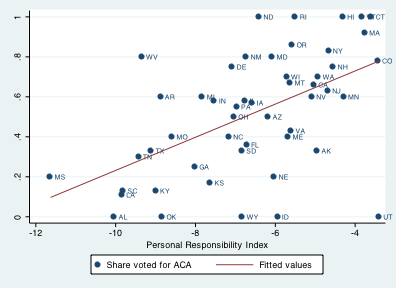
This relationship is statistically significant at the 98 % confidence level (2 % significance).

Fitness index = [exercise - 5x(obesity)]/6.

Index of risky behavior   
= (firearms assaults +5.0 drunk driving deaths + 8.0 teenage pregnancy)/ 14.0

Overall Index of personal responsibility = average of fitness index and (-) risky behavior index.

Graph of States’ congressional votes on ACA (Affordable Care Act, i.e., Obamacare) against Index of Personal Responsibility



This relationship is statistically significant at the 99.9 % confidence level (0.1 % significance).

