

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)

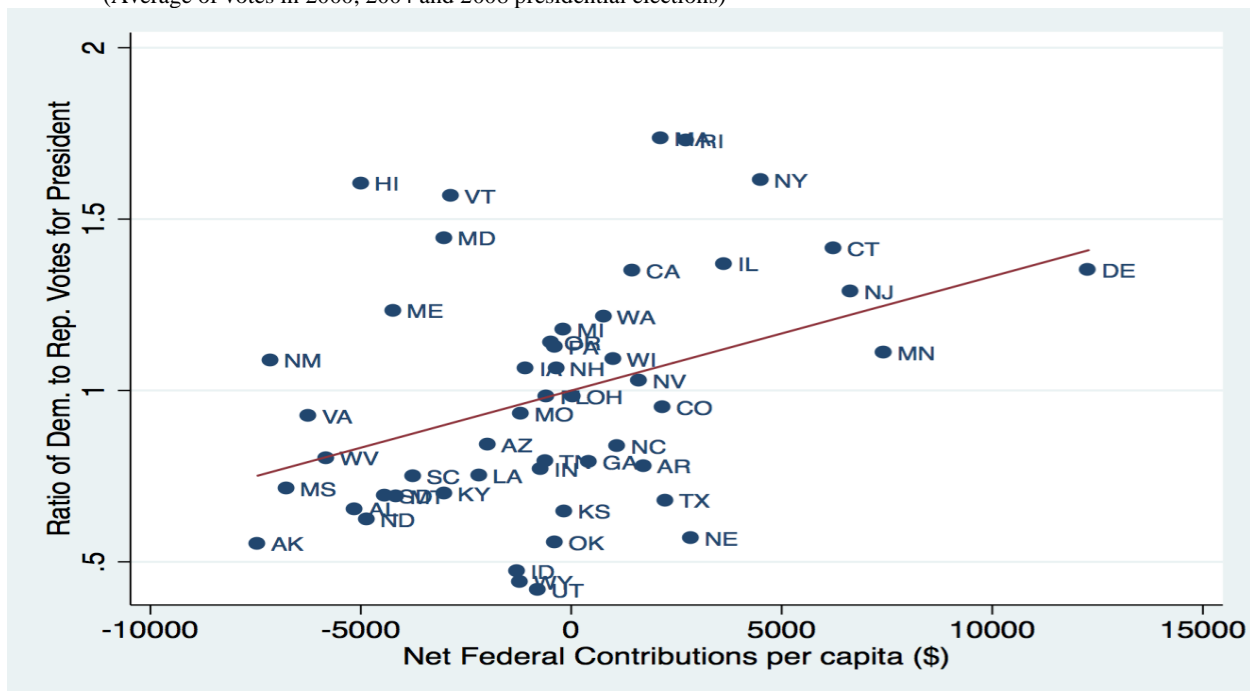


Figure 1b: Federal Taxes Paid minus Spending Received, among Blue vs. Red States (2008 presidential vote)

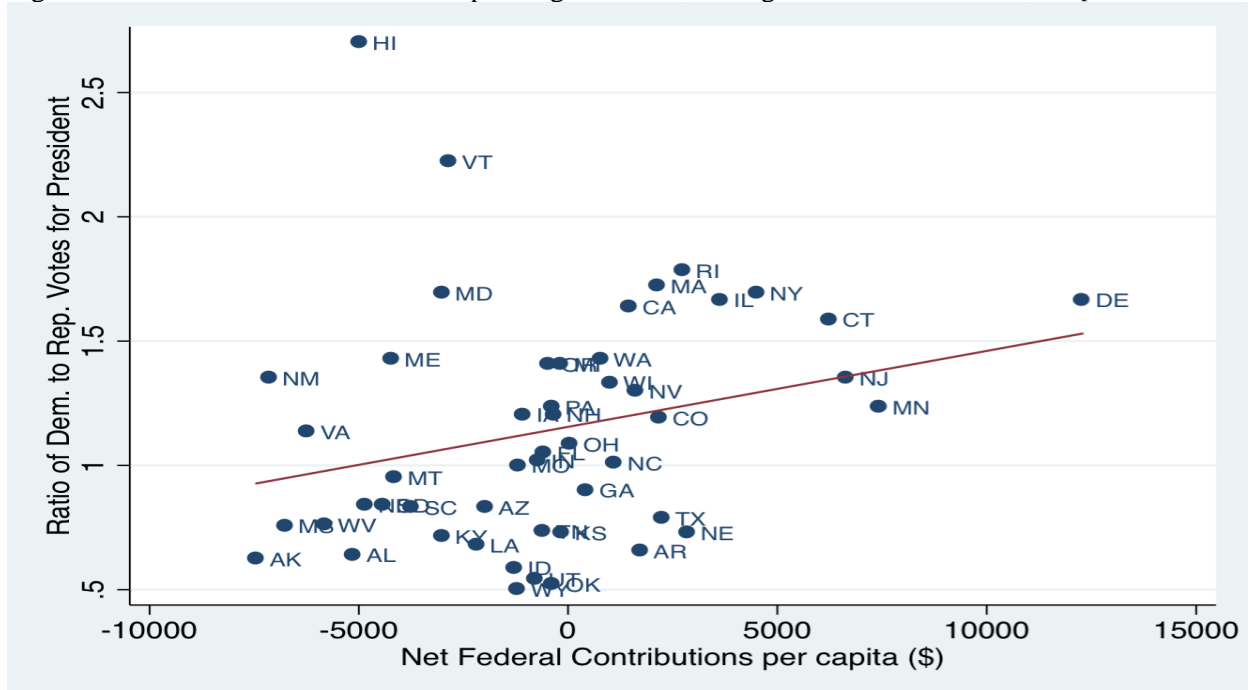


Figure 2a: Obesity (percentage of state population) among Red States and Blue States
(Average of votes in 2000, 2004 and 2008 presidential elections)

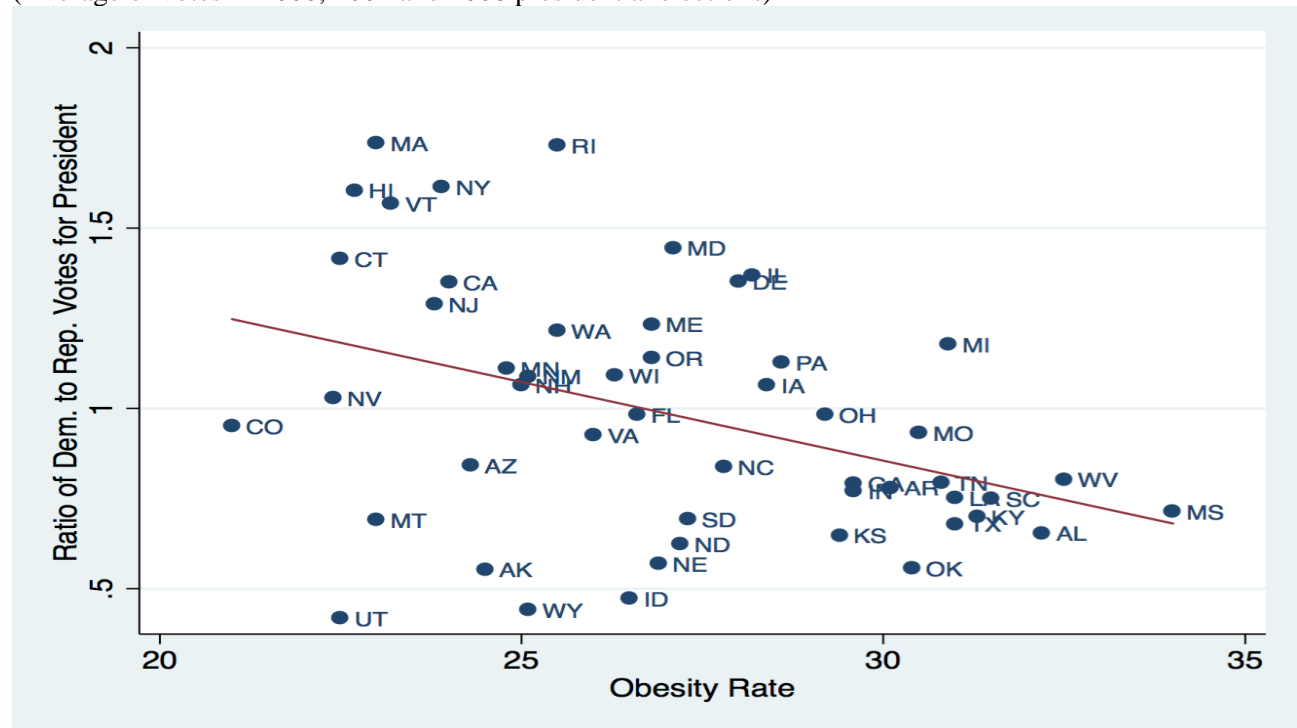


Figure 3a: Teen pregnancy rates (births among girls 15-17 years old) among Blue vs. Red States
(Average of votes in 2000, 2004 and 2008 presidential elections)

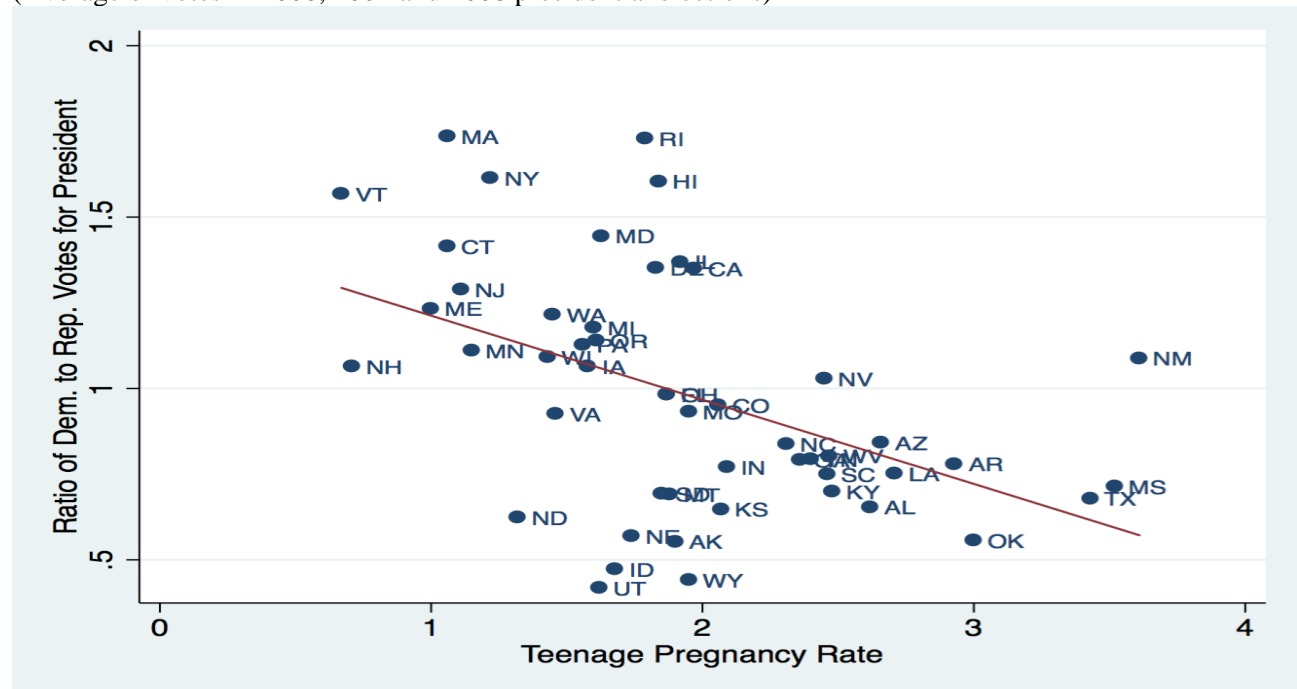


Figure 4a: Chlamydia rates among Blue vs. Red States
(Average of votes in 2000, 2004 and 2008 presidential elections)

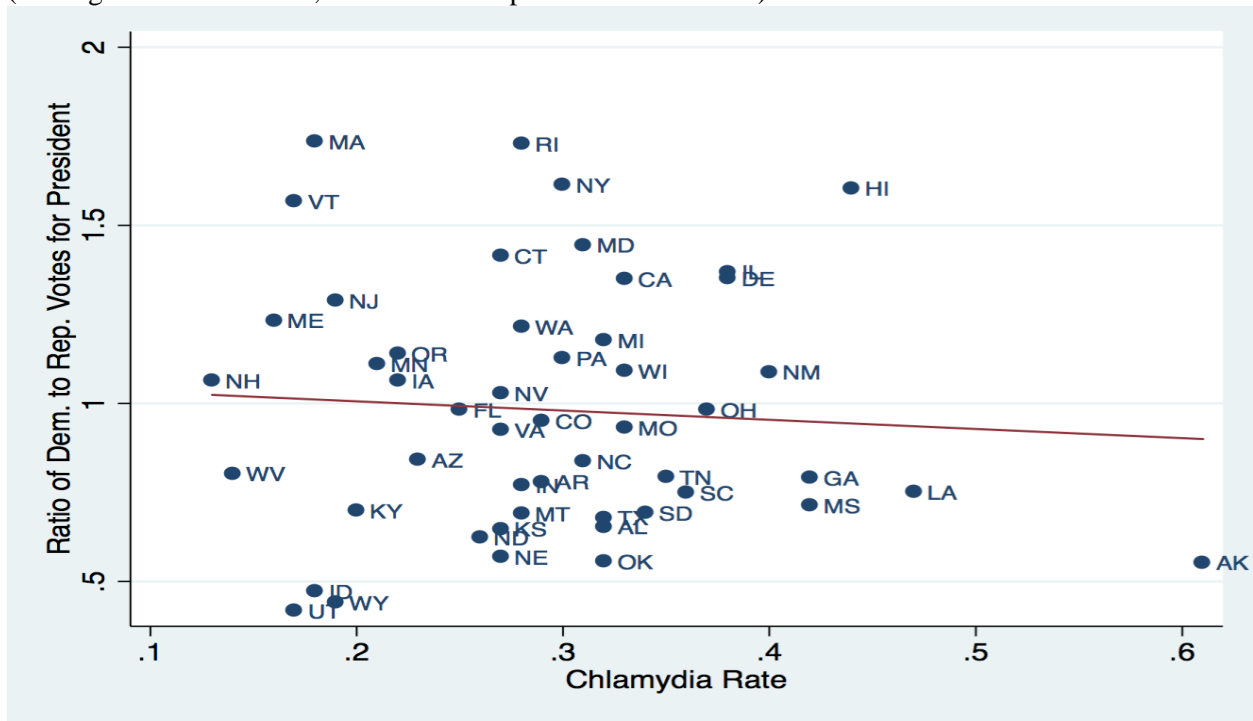


Figure 5a: Smoking (adult rates) among Blue vs. Red States
(Average of votes in 2000, 2004 and 2008 presidential elections)

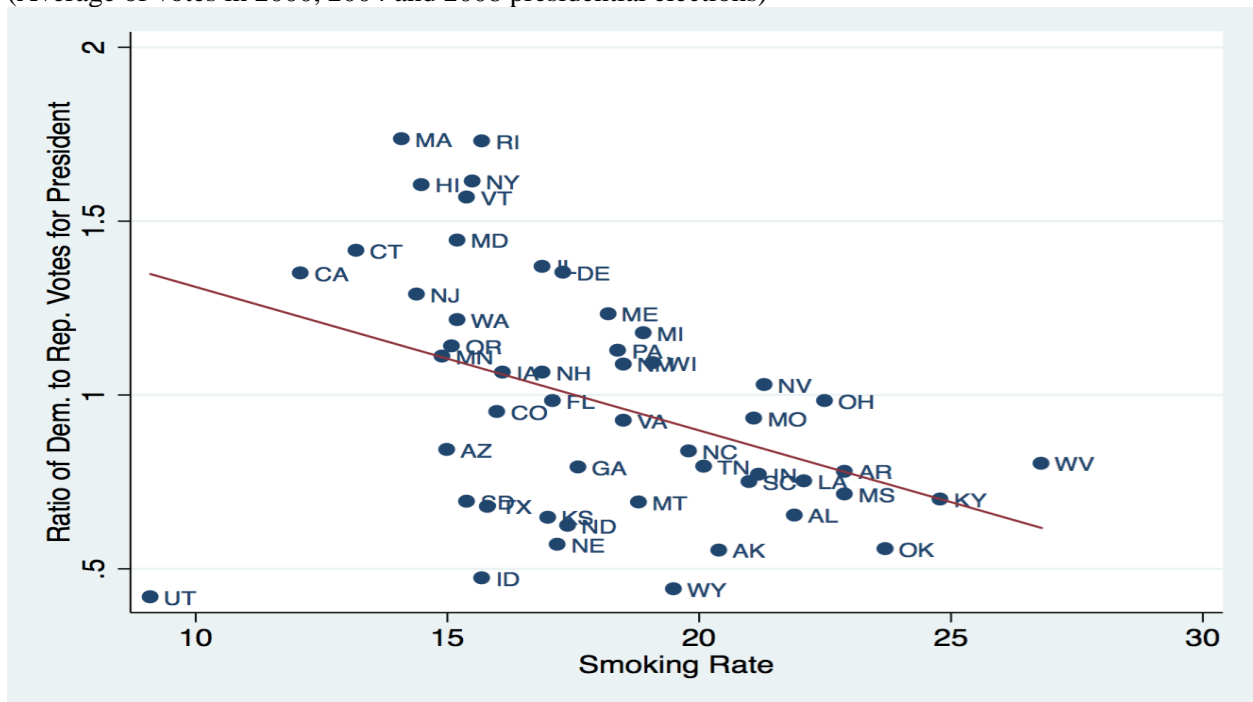


Figure 6a: Drunk driving fatalities among Blue vs. Red States
(Average of votes in 2000, 2004 and 2008 presidential elections)

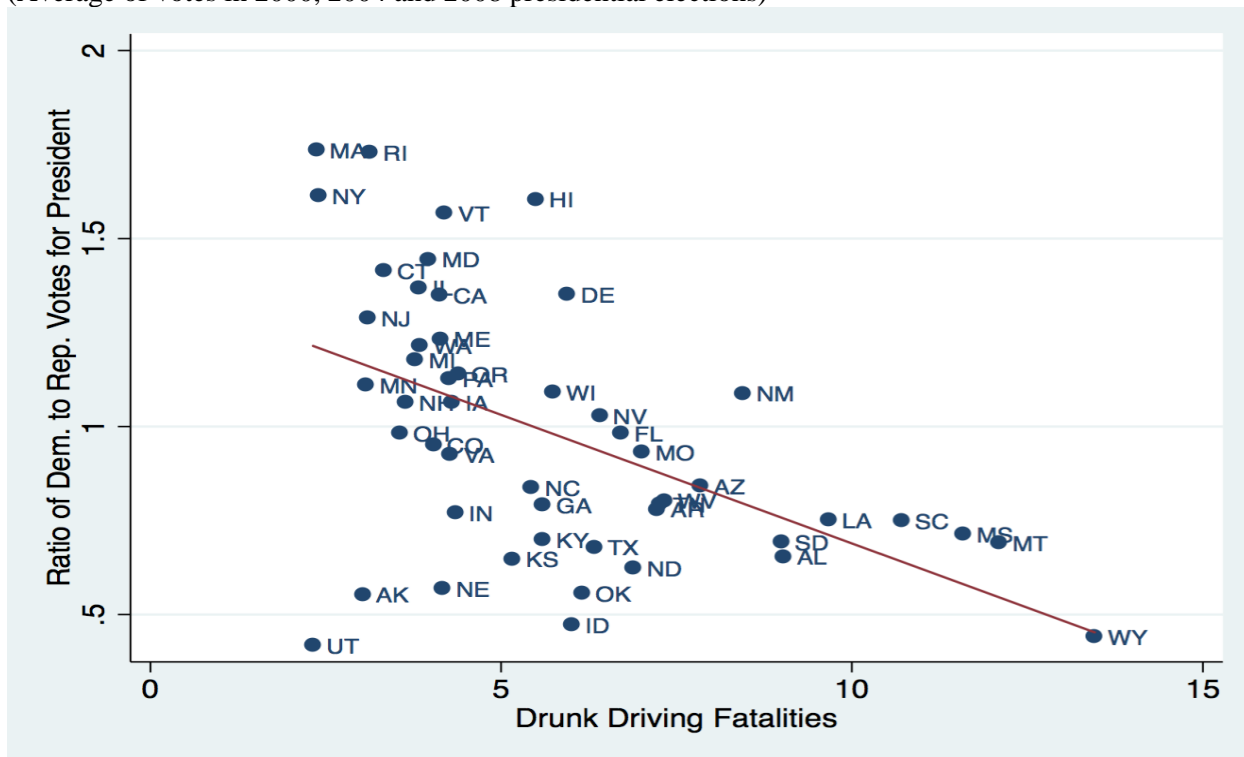


Figure 7a: Firearms assault rates among Blue vs. Red States
(Average of votes in 2000, 2004 and 2008 presidential elections)

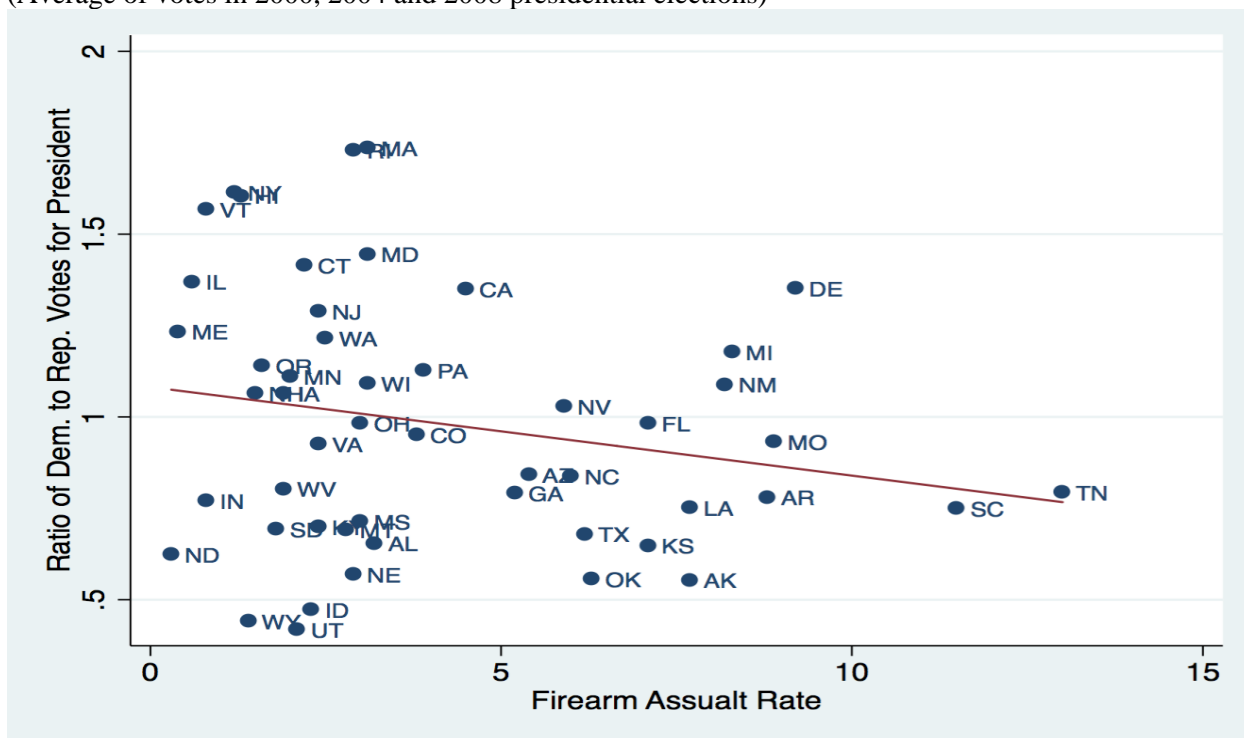


Figure 7b: Firearms assault rates among Blue vs. Red States (2008 presidential vote)

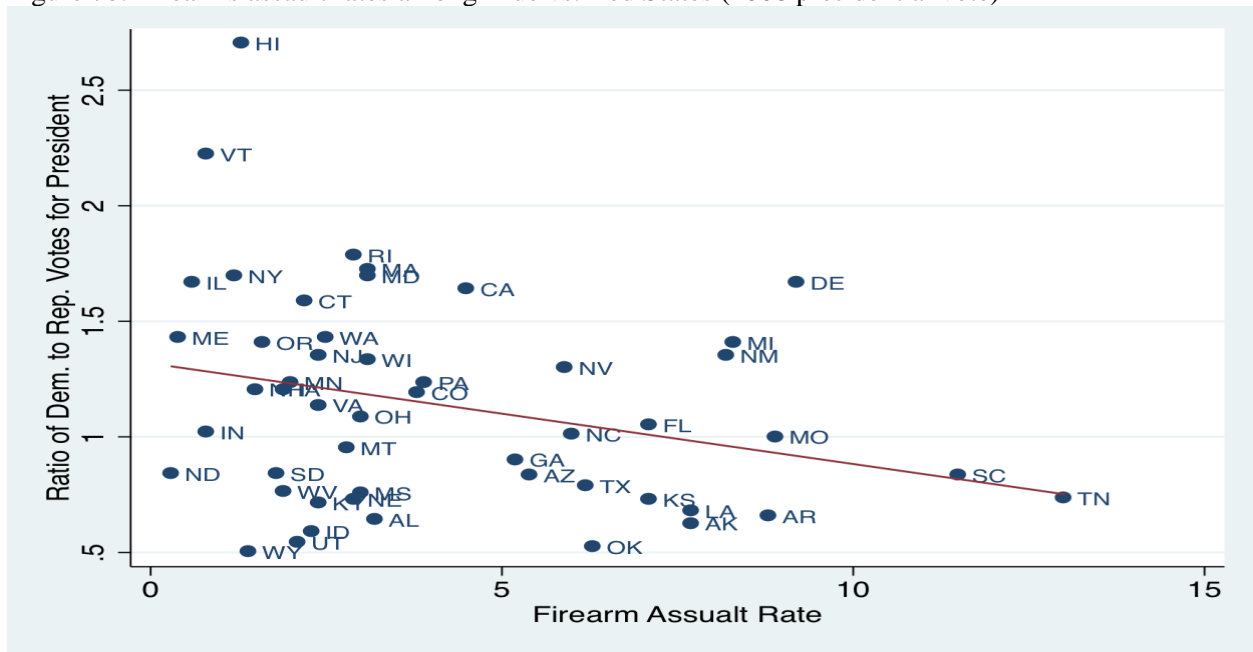


Table 1a: Regressions of Democratic/Republican vote ratio
(three-election average: 2000, 2004 & 2008)
against measures of personal responsibility

VARIABLES	(1) Ratio D/R	(2) 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** (1.526)	1.684*** (0.228)
Observations	50	50
R-squared	0.168	0.301

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

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

VARIABLES	(1) RatioDR2008	(2) 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 (1.657)	2.194*** (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)

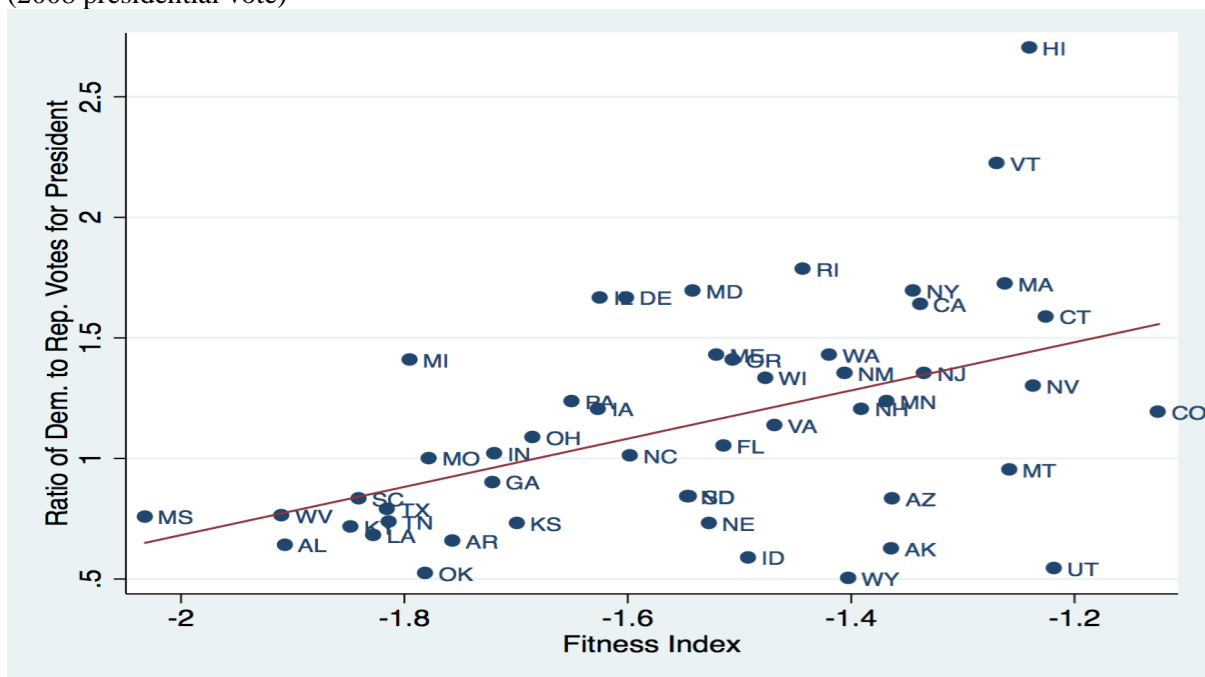


Figure 8a: Hazardous behavior Index (weighted average of smoking, drunk driving fatalities and firearms assaults), among Blue vs. Red States (Average of votes in 2000, 2004 and 2008 presidential elections)

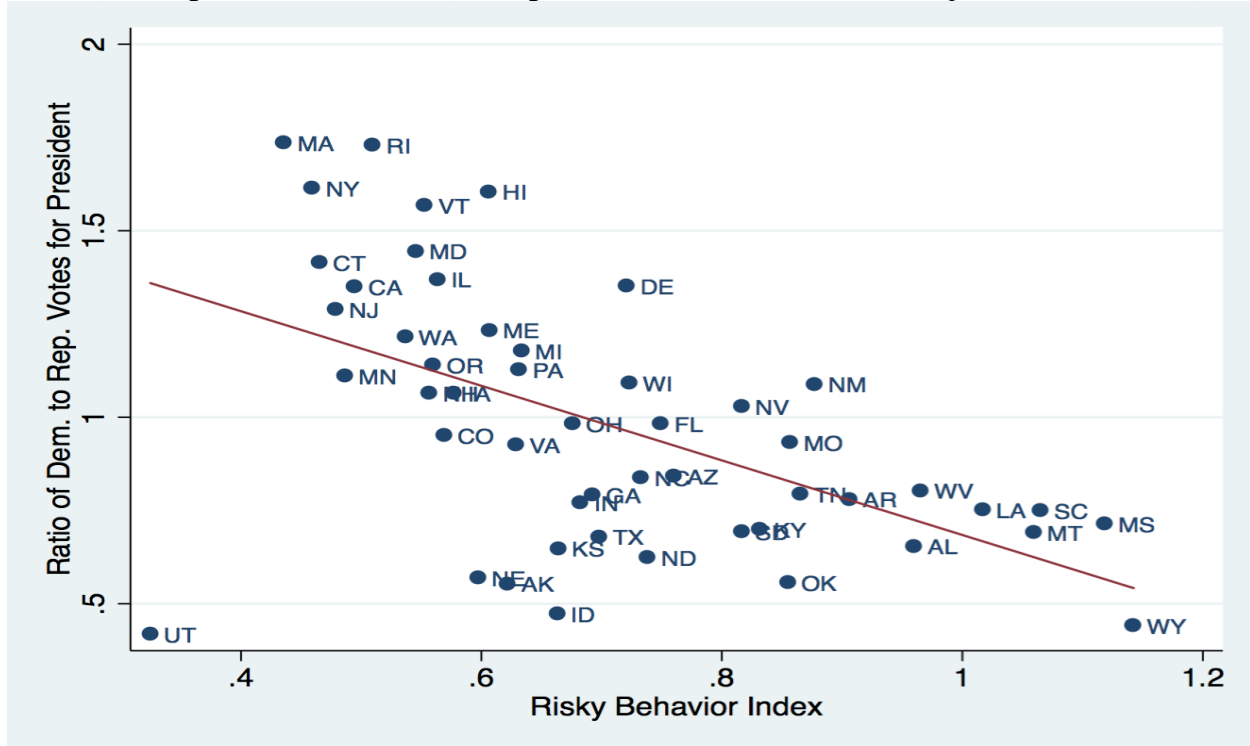


Figure 8b: Hazardous behavior Index (weighted average of smoking, drunk driving fatalities and firearms assaults), among Blue vs. Red States (2008 presidential vote)

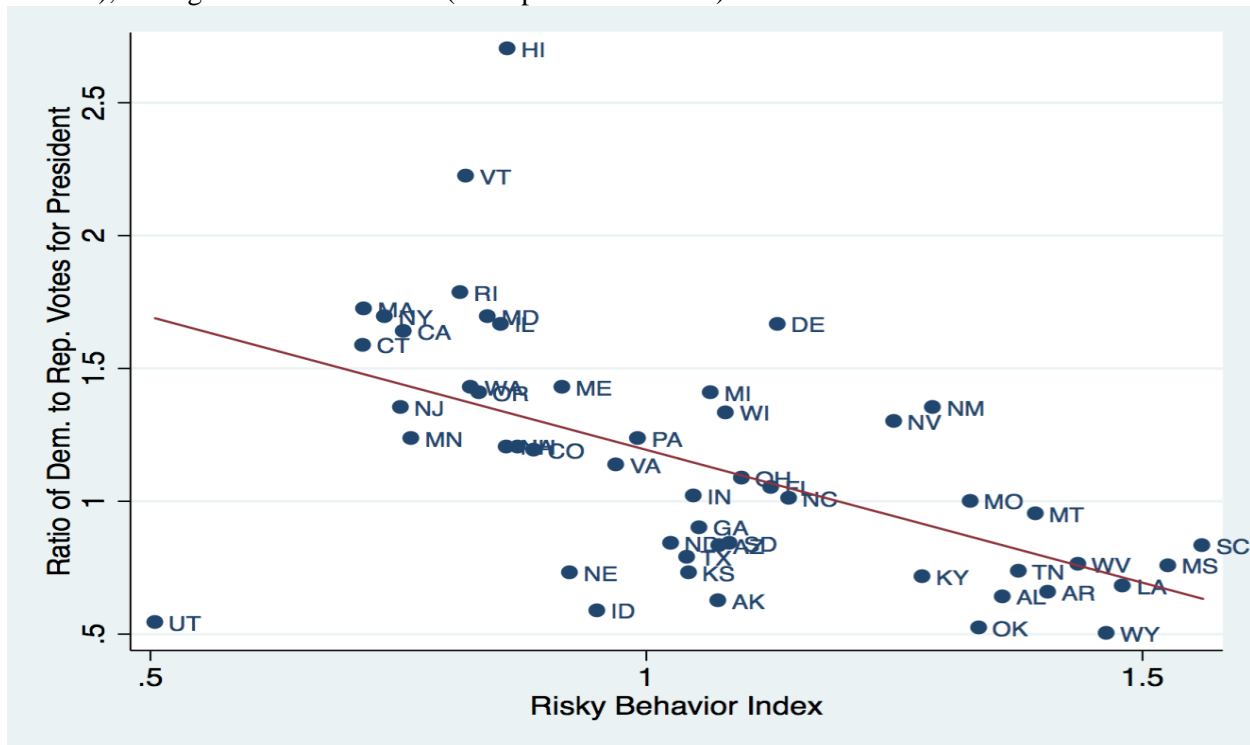


Table 2b: Univariate regressions of Democratic/Republican vote (2008) against measures of personal responsibility					
VARIABLES	(1) RatioDR2008	(2) RatioDR2008	(3) RatioDR2008	(4) RatioDR2008	(5) RatioDR2008
Personal Responsibility Index	0.0876*** (0.0290)				
Obesity Rate		-0.0693*** (0.0194)			
Exercise			0.0417*** (0.0153)		
Drunk Driving Fatalities				-0.0811*** (0.0166)	
Smoking rate					-0.0614*** (0.0218)
Constant	1.715*** (0.220)	3.016*** (0.563)	-2.082* (1.148)	1.603*** (0.131)	2.241*** (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					
VARIABLES	(1) RatioDR2008	(2) RatioDR2008	(3) RatioDR2008	(4) RatioDR2008	(5) 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*** (0.175)	1.149*** (0.262)	1.318*** (0.120)	1.822*** (0.234)	1.777*** (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)

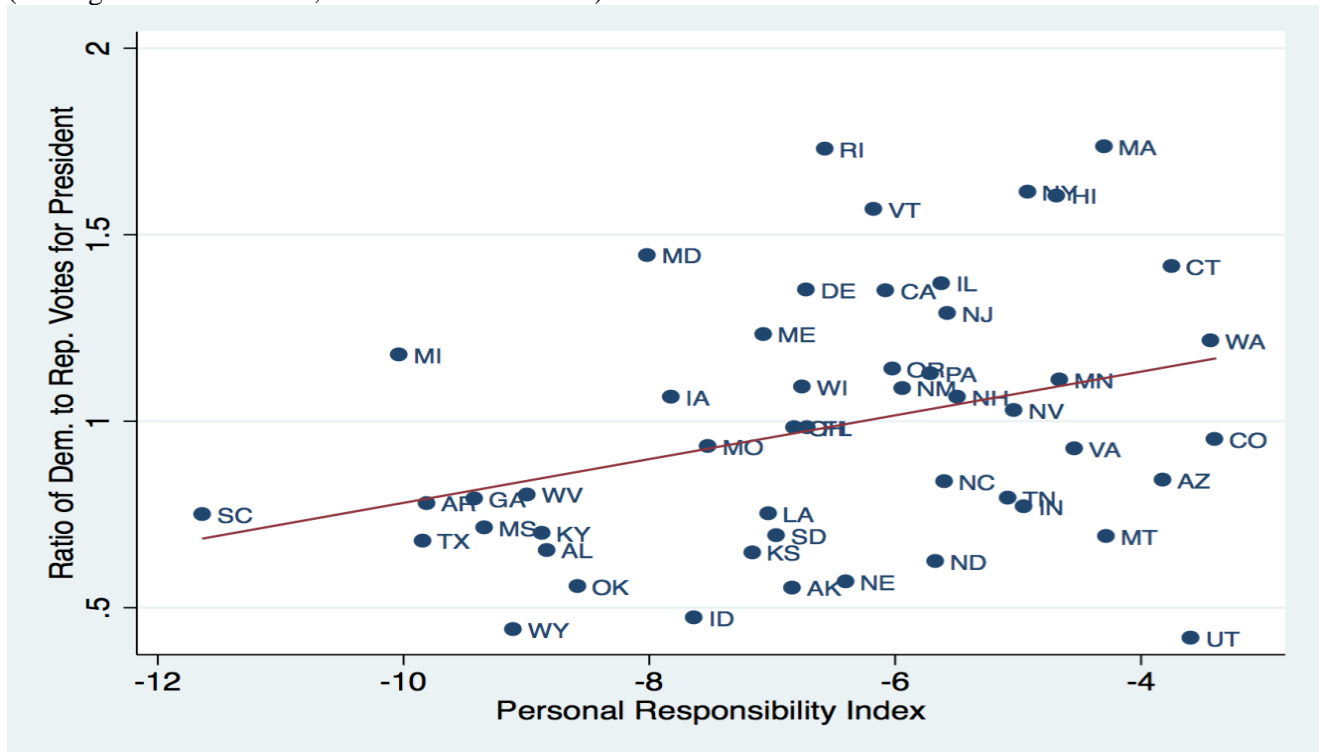


Table 3: Data for the 50 states

State	Repub/Dem Vote 2008	Obesity	Exercise	Drunk Driving Fatalities	Smoking (adult rate)	Teen Pregnancy	Chlamydia rate	Firearms Assault rate	Personal 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
<u>Maryland</u>	<u>0.59</u>	<u>27.1</u>	<u>78.1</u>	<u>3.97</u>	<u>15.2</u>	<u>1.63</u>	<u>0.31</u>	<u>3.1</u>	<u>-8.01</u>
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.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 = $[\text{exercise} - 5 \times (\text{obesity})] / 6$.

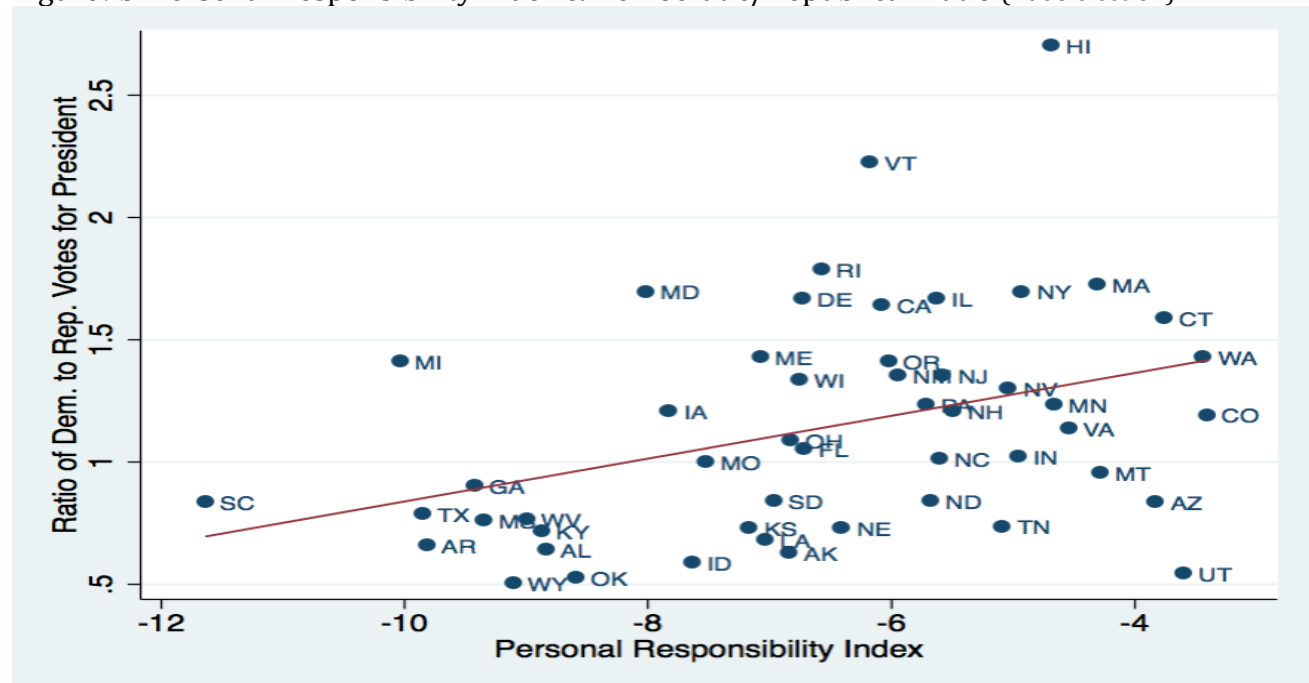
Index of risky behavior

= $(\text{firearms assaults} + 5.0 \text{ drunk driving deaths} + 8.0 \text{ teenage pregnancy}) / 14.0$

Overall Index of personal responsibility

= average of fitness index and (-) risky behavior index.

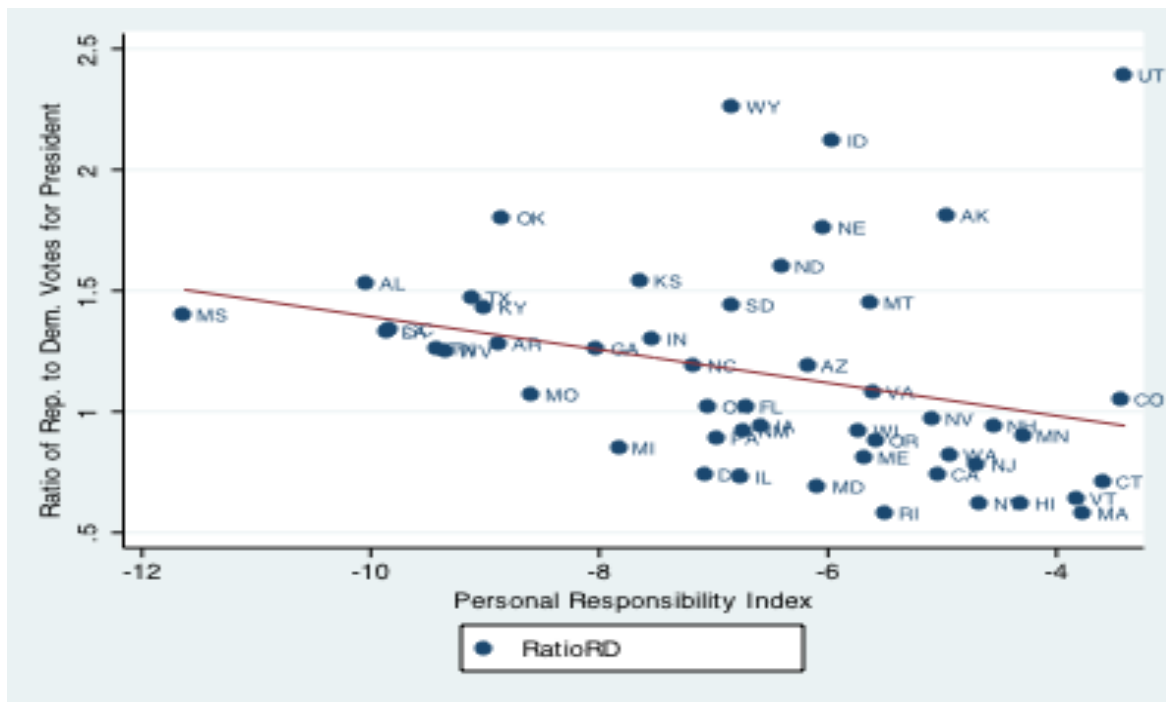
Figure9b: Personal Responsibility Index & Democratic/Republican ratio (2008 election)



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

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Linear regression

Number of obs = 50
F(1, 48) = 5.21
Prob > F = 0.0269
R-squared = 0.0957
Root MSE = .41914

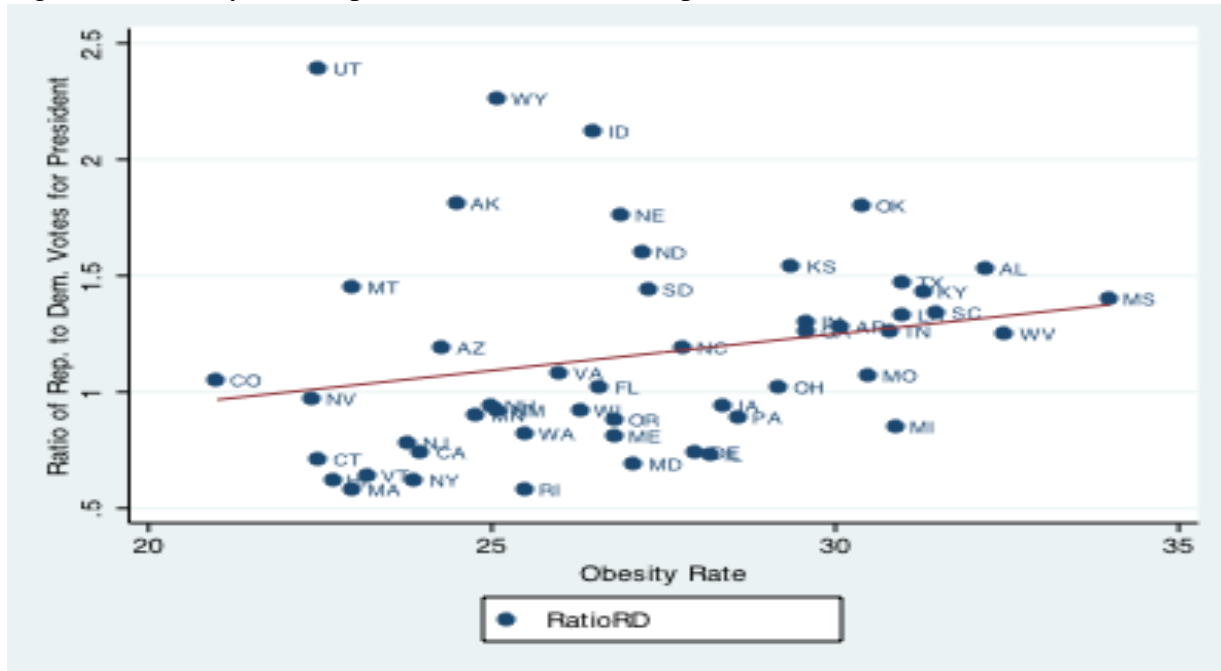
	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
personalre~x	-.0683796	.029949	-2.28	0.027	-.1285961	-.0081631
_cons	.7086316	.236295	3.00	0.004	.2335286	1.183735

Scatter plot showing the relationship between the Personal Responsibility Index (X-axis) and the Ratio of Rep. to Dem. Votes for President (Y-axis). The X-axis ranges from -12 to -3, and the Y-axis ranges from 0 to 2. A negative linear regression line is shown. States are labeled with their abbreviations.

State	Personal Responsibility Index (X)	Ratio of Rep. to Dem. Votes for President (Y)
SC	-11.5	1.2
MI	-10.0	0.7
TX	-9.8	1.3
AR	-9.8	1.5
GA	-9.5	1.1
WY	-9.2	2.0
MO	-9.2	1.3
AL	-8.8	1.55
OK	-8.5	1.9
IA	-8.2	0.8
ID	-7.8	1.7
KS	-7.2	1.4
LA	-7.0	1.5
AK	-7.0	1.6
NE	-6.8	1.4
SD	-7.0	1.2
ND	-5.8	1.2
TN	-5.2	1.4
NC	-5.8	1.0
IN	-5.2	1.0
VA	-4.8	0.9
MT	-4.5	1.1
AZ	-3.8	1.2
UT	-3.5	1.8
CO	-3.5	0.8
WA	-3.2	0.7
CT	-3.5	0.6
MA	-4.2	0.6
NY	-5.0	0.6
HI	-4.8	0.4
VT	-6.2	0.4
RI	-6.8	0.6
DE	-6.8	0.6
ME	-6.8	0.7
WI	-6.8	0.7
OH	-6.8	0.9
FL	-6.8	0.9
PA	-5.8	0.8
NH	-5.8	0.8
NJ	-5.8	0.8
OR	-5.8	0.7
CA	-5.8	0.6
IL	-5.8	0.6
MD	-8.2	0.6

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.

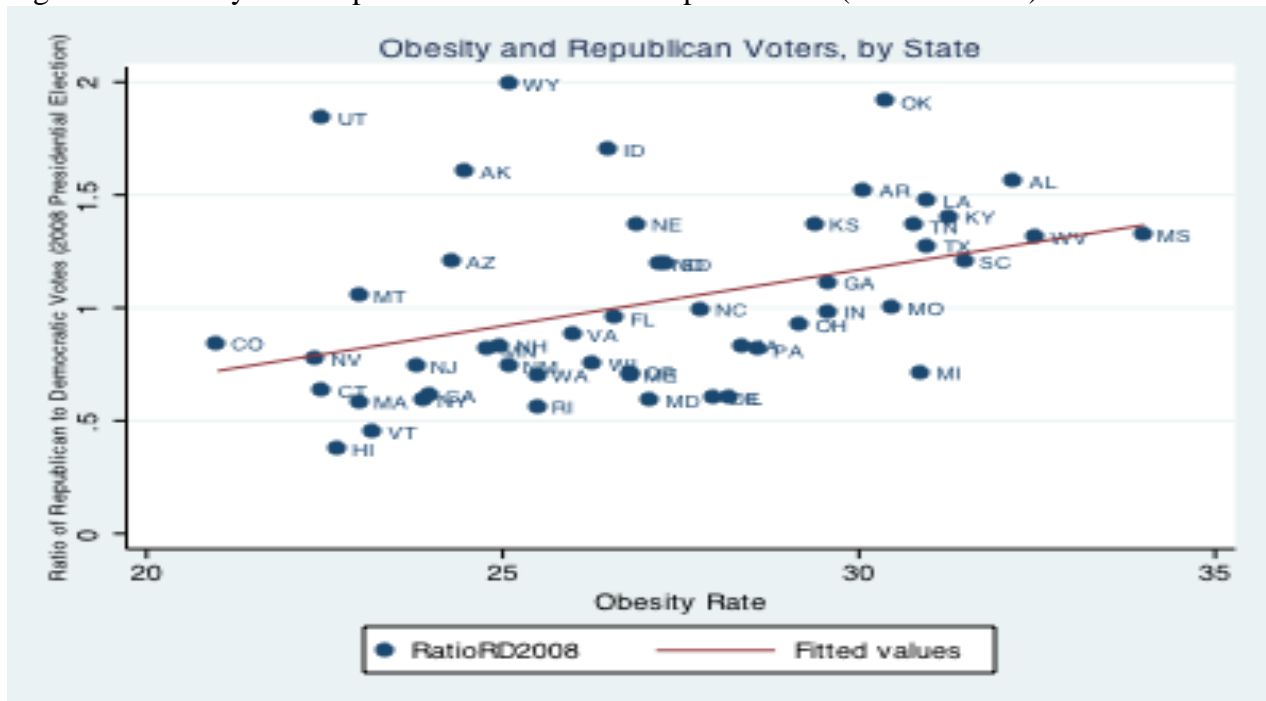
. reg ratiord obesity, robust

Linear regression

Number of obs = 50
F(1, 48) = 3.01
Prob > F = 0.0894
R-squared = 0.0528
Root MSE = .42896

ratiord	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
obesityrate	.0314087	.018115	1.73	0.089	-.0050139	.0678314
_cons	.3074627	.5286415	0.58	0.564	-.7554423	1.370368

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)

reg ratiord obesity, robust

Linear regression

Number of obs = 51
 F(1, 49) = 11.98
 Prob > F = 0.0011
 R-squared = 0.1869
 Root MSE = .38272

ratiord2008	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
obesityrate	.0561855	.0162301	3.46	0.001	.0235699	.0888012
_cons	-.5117527	.4623847	-1.11	0.274	-1.44095	.4174442

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

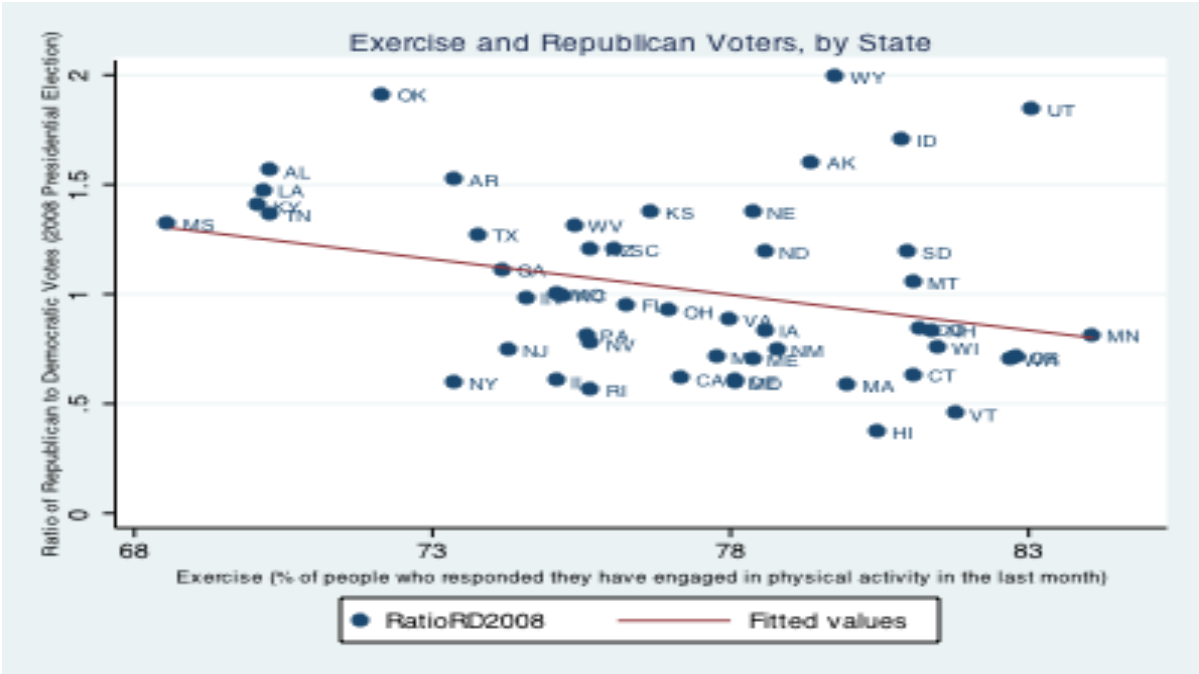
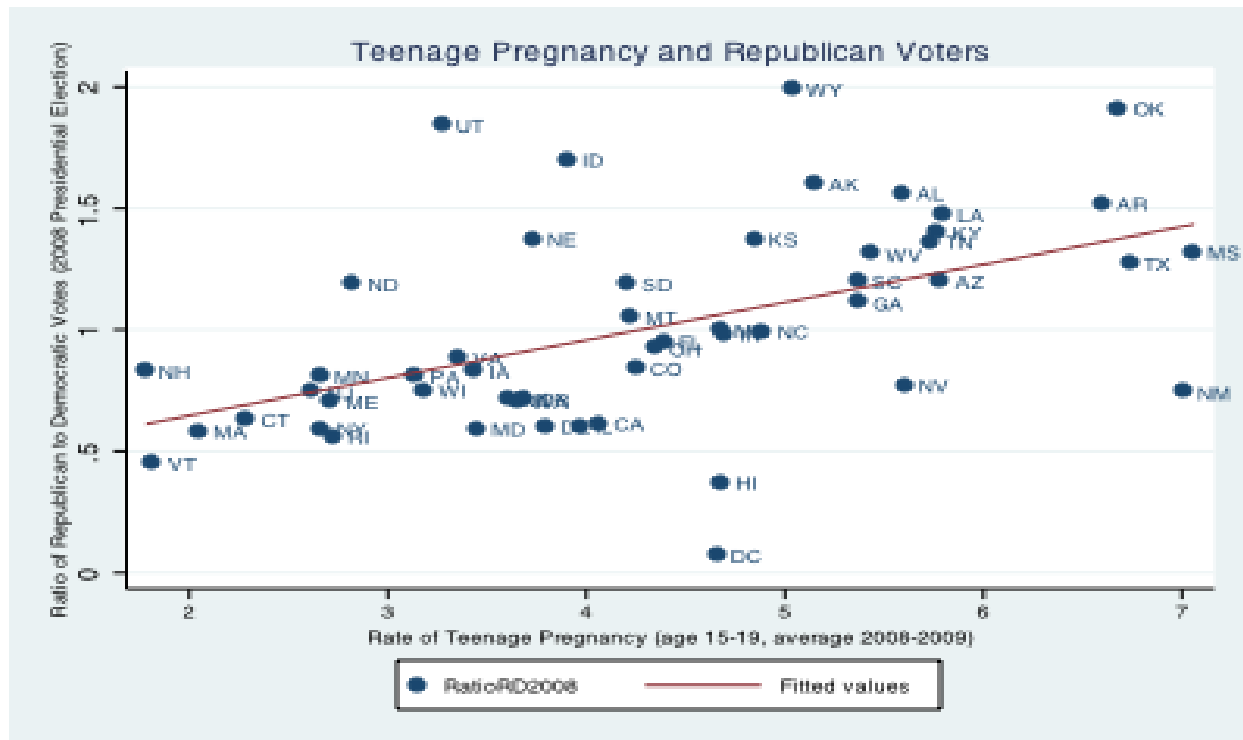


Figure 3d: Teenage Pregnancy² and Republican/Democrat Popular Votes (2008 Election)



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).

reg ratio rate, robust

Linear regression

Number of obs = 51
 F(1, 49) = 22.32
 Prob > F = 0.0000
 R-squared = 0.2606
 Root MSE = .36497

ratiord2008	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
rate_15_19	.1555704	.0329327	4.72	0.000	.0893897	.2217512
_cons	.3359513	.1390579	2.42	0.019	.056504	.6153987

Table 2d: Univariate regressions of Republican/Democratic vote (2008) against measures of personal responsibility					
VARIABLES	(1) RatioRD2008	(2) RatioRD2008	(3) RatioRD2008	(4) RatioRD2008	(5) 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** (0.194)	-0.322 (0.448)	3.528*** (1.098)	0.602*** (0.134)	0.196 (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					
VARIABLES	(1) RatioRD2008	(2) RatioRD2008	(3) RatioRD2008	(4) RatioRD2008	(5) 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*** (0.145)	0.981*** (0.229)	0.902*** (0.0957)	0.527*** (0.189)	0.466*** (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:		State's ranking in measures of risky behavior vs. personal responsibility							
Six states with highest share voting for Obamacare (Affordable Care Act)		Obe sity	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

. reg share obesity, robust

Linear regression

Number of obs = 50
F(1, 48) = 13.54
Prob > F = 0.0006
R-squared = 0.2262
Root MSE = .27069

sharevoted-a	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
obesityrate	-.0453915	.012337	-3.68	0.001	-.0701967	-.0205862
_cons	1.745473	.3423931	5.10	0.000	1.057046	2.433901

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

Exercise

. reg share exercise, robust

Linear regression

Number of obs = 50
F(1, 48) = 9.26
Prob > F = 0.0038
R-squared = 0.1590
Root MSE = .28221

sharevoted-a	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
exercise	.0320396	.0105273	3.04	0.004	.0108731	.0532062
_cons	-1.957076	.7994489	-2.45	0.018	-3.564475	-.349676

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

Drunk Driving

. reg share drunk, robust

Linear regression

Number of obs = 50
F(1, 48) = 9.33
Prob > F = 0.0037
R-squared = 0.1593
Root MSE = .28215

sharevoted-a	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
drunkdriving	-.0465173	.0152316	-3.05	0.004	-.0771426	-.0158921
_cons	.7819301	.0967578	8.08	0.000	.5873855	.9764747

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

Smoking

. reg share smoking, robust

Linear regression

Number of obs = 50
F(1, 48) = 2.83
Prob > F = 0.0989
R-squared = 0.1064
Root MSE = .2909

sharevoted-a	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
smokingadu-e	-.0287753	.0171009	-1.68	0.099	-.063159	.0056084
_cons	1.032919	.3174577	3.25	0.002	.3946277	1.671211

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

Teenage Pregnancy (15-17)

. reg share teenage, robust

Linear regression

Number of obs = 50
F(1, 48) = 9.41
Prob > F = 0.0035
R-squared = 0.1865
Root MSE = .27756

sharevoted-a	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
teenagepre-y	-.1952215	.0636246	-3.07	0.004	-.3231473	-.0672956
_cons	.8943783	.1226372	7.29	0.000	.6477996	1.140957

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

Chlamydia

. reg share chlamydia, robust

Linear regression

Number of obs = 50
F(1, 48) = 0.73
Prob > F = 0.3958
R-squared = 0.0149
Root MSE = .30544

sharevoted-a	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
chlamydias-e	-.4027135	.4700305	-0.86	0.396	-1.347773	.5423462
_cons	.6334313	.1509238	4.20	0.000	.3299786	.936884

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

Firearm assaults

. reg share firearm, robust

Linear regression

Number of obs = 50
F(1, 48) = 5.96
Prob > F = 0.0184
R-squared = 0.0841
Root MSE = .29451

sharevoted-a	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
firearmass-e	-2.902281	1.189295	-2.44	0.018	-5.293519	-.5110428
_cons	.6353418	.0729397	8.71	0.000	.4886866	.781997

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

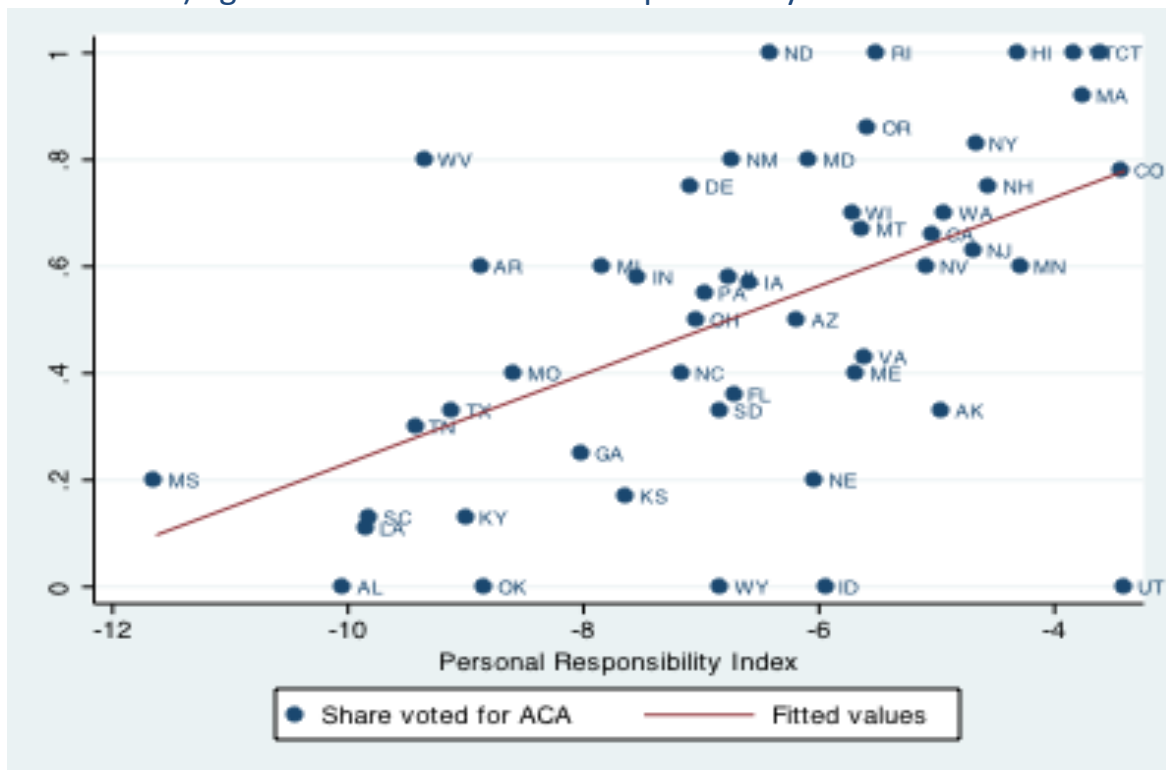
Fitness index = $[\text{exercise} - 5 \times (\text{obesity})] / 6$.

Index of risky behavior

= $(\text{firearms assaults} + 5.0 \text{ drunk driving deaths} + 8.0 \text{ teenage pregnancy}) / 14.0$

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



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. reg share personal, robust
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Linear regression

Number of obs = 50
F(1, 48) = 17.90
Prob > F = 0.0001
R-squared = 0.2885
Root MSE = .25958

sharevoted-a	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
personalre-x	.082908	.0195965	4.23	0.000	.0435066	.1223094
_cons	1.061087	.1423106	7.46	0.000	.7749522	1.347221

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