The Supreme Court today upheld the Affordable Care Act of 2010, otherwise known as Obamacare. Judging from the polls, American public opinion appears to be very sharply divided over the legislation. Some view it as socialism, others as the first success in a half-century of efforts to achieve a sensible national policy on health care.

What explains the wide divergence of views? An economists’ approach – cynical or naïve depending on how you look at it – would be to assume that citizens vote according to their own personal interests. Getting the uninsured onto paid insurance through the individual mandate is very much in some people’s interest, but not necessarily as strongly in others’ interests. So let’s take a look.

Those who have the most to gain from President Obama’s health care legislation are those who have a pre-existing condition or are pre-disposed to illness, for example because they are overweight. They are more likely to need medical care in the future, but can be charged higher rates if they try to buy private insurance, by virtue of their condition. Or they can be excluded completely. (Each obese American incurs medical costs 42% higher than those of normal weight.)

I show how Congressmen voted on the Affordable Care Act on the vertical axis of figure 1, with the states’ rates of obesity on the horizontal axis. There is a statistically significant relationship. But the relationship goes the other way: states where more people are overweight, such as Mississippi, Alabama, South Carolina and Texas, are more likely to oppose Obamacare. In those parts of the country where people are slimmer, such as New England, New York and Colorado, there is strong support for health care reform. For every one percentage point increase in obesity, support for Obamacare declines on average by an estimated four percentage points.

There are some outliers, of course. Utah’s population appears to be physically fit (and to do well by other measures that we will be looking at later), while opposing the Affordable Care Act and voting Republican. Mormons are apparently exceptional in the extent to which they abide in their personal lives by the strictures of their religion. Could this be why evangelicals tend to resent Mormons so much, according to opinion polls? (I won’t try to speculate on what light Utah’s outlier status might shed on Mitt Romney’s tendency to oscillate wildly on such questions as the individual mandate for health insurance.)

The District of Columbia is not in truth an outlier: its rate of obesity is even lower than Utah’s and it votes overwhelmingly Democratic. But it has no voting Congressperson, and so should not have been included in the original version of Figure 1 that I posted June 28. Accordingly I have now removed DC from the data sample.
true statistical relationship between obesity and party affiliation is now revealed to be even stronger than it appeared before.

Obesity is partly genetic, of course, but also is determined by habits of exercise and eating. The states where residents get the most physical exercise are Minnesota, Utah, Oregon, Washington and Vermont; the states that get the least are Mississippi, Tennessee, Kentucky, Louisiana and Alabama. Figure 3 shows the correlation between exercise and the vote on the health care reform legislation. Again it is statistically significant. The states where people are the most physically fit, and so have the least to gain from Obamacare, are the ones that support it the most strongly. Another data source tells us the states with bad eating habits: the five that rank the worst are Mississippi, Alabama, Missouri, Kansas and Oklahoma.

It’s not just obesity and exercise. The states that rank the best on an overall health index are Vermont, New Hampshire, Massachusetts, Minnesota, and Maine and Iowa. The states where people are the least healthy overall are Louisiana, Mississippi, New Mexico, Nevada, Oklahoma and Texas. The weight of the evidence is fairly clear: the states where people are most in need of help getting insurance are the states that oppose the legislation that makes that possible. (I hope in future blogs to look at such other specific risk factors as unprotected sex, drunk driving, and smoking habits.)

It seems that the economists’ view of the world is wrong. People are not voting in their self interest. What is going on here?

I can think of two plausible explanations as to why those who stand to benefit from Obamacare should oppose it politically: (1) “ignorance” (I am using ignorance in its literal meaning -- lack of knowledge regarding the bill – not to mean lack of intelligence), and (2) partisanship.

Most people don’t know what Obama’s bill does. Many think that it reduces personal responsibility for health care. But the truth is the opposite. Under the current system, hospitals are required to treat patients who show up at the emergency entrance with a heart attack – even if their condition is partly their fault, due to habits of overeating and under-exercising. The hospitals have to pass the costs on, and the rest of us end up footing the bill. The universal mandate is designed to fix that, by making everyone pay for the health care they get (and perhaps even encouraging them to see a doctor who will advise them to adopt a healthy life style). Establishing personal responsibility, not socialized medicine, is the reason why conservative think tanks proposed the idea of the universal mandate in the first place, and why Mitt Romney enacted it in Massachusetts. But most people seem still to be unaware of this. If people do not understand their economic interests, that may explain why the voting patterns do not line up correspondingly.

The other, not inconsistent, explanation, is that people are voting along simple party lines. Figure 2 shows the popular vote in the 2008 presidential election on the vertical axis, state by state. The states where people are the most likely to be overweight or
obese tend to vote Republican. Evidently the people in New England, New York, Hawaii and DC, who more often vote Democratic, are slimmer. A one percentage point increase in the obesity rate is estimated to raise the ratio of Republican to Democratic voters from 1.00 to 1.06 (easily enough to swing an election). The statistical confidence interval (“margin of error”) is narrow enough to exclude a zero effect.

So ideology is much less important than party affiliation. This is the same result when one looks at which states receive more federal subsidies: despite all the rhetoric about “getting the government off our backs,” it is the supposedly red states, i.e., those where people vote Republican, that receive the most transfers from Washington. Alaska, Mississippi, Louisiana, West Virginia, and the Dakotas top the list. The Democratic-leaning states are the ones paying into the federal government and subsidizing everyone else: New England, New York, New Jersey, California. Those who claim to be fiscally conservative are the ones who in fact tend to feed voraciously at the public trough.

Sex, Red States, and the Affordable Care Act

Jeffrey Frankel, Harvard University, July 2012

In my preceding blogpost I noted the paradox that those who are observably more likely to become ill, such as the obese, are the ones who stand to benefit the most from the universal mandate in Obamacare, but that the states with the most obese people are the ones who oppose it politically.

Many other people besides the obese are hurt by the unavailability of private insurance. They include those who have reason to believe that they are more likely to need medical care, even in cases where the insurance companies may have a hard time telling the difference. An example is people who engage in risky behavior, such as unprotected sex. Precisely because the health insurers cannot distinguish them from others, they have to charge everybody high rates, to the point where there may be no functioning market at all. The theoretical difficulty is known as the “lemons problem” arising from adverse selection; it leads to a “death spiral,” with the insurance market collapsing as the healthier population exits from it. In the June 28 Supreme Court decision upholding the Affordable Care Act, Justice Ruth Bader Ginsburg pointed out that the individual mandate had solved this problem in Massachusetts.

Perhaps those who are inclined to engage in risky behavior are the ones most aware of the problems that adverse selection create for the viability of private health insurance? Figure 4 shows, state by state, how Congressmen voted on the Affordable Care Act, on the vertical axis, against the rates of teenage pregnancy on the horizontal axis. The relationship is statistically significant. (The chance is less than one in a thousand that
there is in truth no relationship and that the correlation is the result of random chance.) But states where more teenagers get pregnant, such as Texas and Oklahoma, are more likely to oppose Obama care. (A similar correlation seems to hold between rates of chlamydia, a sexually transmitted disease, and opposition to health care reform.)

In the preceding blog we saw that the states that oppose Obamacare, while tending to obesity, also are the states that vote Republican. Is the same thing true of risky sexual behavior? Figure 5 puts the popular vote in the 2008 presidential election on the vertical axis. The result is by now familiar. The states with the high teenage pregnancy rates tend to vote Republican. The relationship is highly significant statistically. Evidently the people in New England, New York and Hawaii, who more often vote Democratic, are not just slimmer but are also less prone to engage in unprotected sex than those in the South and Midwest.

It seems to me that, until now, we who live in the blue states have, out of politeness, mostly held back from pointing out that those who live in the red states seem to show behavior in their personal life that falls short of the conservative rhetoric in which their politicians revel. It would be especially unseemly to point fingers at any category of fellow Americans -- geographic, racial, socioeconomic, or other -- and imply that they are promiscuous, fat, gluttonous, lazy, uneducated, or that they are more prone to divorce and shootings. Fortunately, conservative Charles Murray points out some of these statistics in his latest book, Coming Apart. Murray seems to imply that the social pathologies of the red zip codes are somehow the fault of those who live in the blue zip codes (and his readers seem to buy this, judging from most book reviews). But David Brooks, who is also considered “conservative,” seems to realize more clearly the implications of the geographic divide. So perhaps we “liberal” blue staters can continue our discrete silence on the subject.
I. FITNESS (OBESITY and EXERCISE)

Figure 1. Obesity and Congressional Support for Health Reform

The District of Columbia has now been omitted since it has no voting Congressperson.

The relationship is now statistically significant at the 0.1% level.
I.e., the probability of getting these results by chance is less than 1 in a 1,000.
The estimated effect is now 3.7 standard errors away from zero; quite a fat margin of error.
(See the STATA regression output below).

```
. 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      =  0.2709

sharevoted-a |      Coef.    Std. Err.     t    P>|t|     [95% Conf. Interval]
-------------|---------------------------------------------------------
obesityrate  |  -0.0453915     0.012337    -3.68    0.001    -0.0701967    -0.0205862
_cons        |   1.745473     0.3423931     5.10    0.000     1.057046     2.433901
```

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

This is a statistically significant relationship, again at the 0.1 % level.

```
reg ratioRD2008 obesity, robust
Linear regression
Number of obs = 51
F( 1,  49) = 11.96
Prob > F    = 0.0011
R-squared   = 0.1869
Root MSE    = .38272

|            | Coef. | Std. Err. | t     |  P>|t|  | [95% Conf. Interval] |
|-------------|-------|-----------|-------|------|---------------------|
|ratioRD2008  |       |           |       |      |                     |
|obesityrate  | 0.8561855 | 0.0162391 | 3.46  | 0.001| 0.6235699 - 0.8888012|
|_cons        | -0.5117527 | 0.4623847 | -1.11 | 0.274| -1.444095 - 0.4174442|
```

1 Source: CDC, http://www.cdc.gov/obesity/data/trends.html#State
Figure 3: Exercise and Support for ACA

Again the relationship is highly significant statistically.
Regression of exercise and ACA (Hawaii not available)
```
. reg share exercise, robust

Linear regression

Number of obs = 49
F( 1,    47) = 8.17
Prob > F    = 0.0063
R-squared    = 0.1467
Root MSE     = .27062

|         | Coef. | Std. Err. | t     | P>|t|   | 95% Conf. Interval |
|---------|-------|-----------|-------|-------|-------------------|
|exercise| 0.0301964 | 0.0105671 | 2.86  | 0.006 | 0.0089381 - 0.0514547 |
|_cons   | -1.822637 | 0.825813  | -2.27 | 0.028 | -3.437223 - 0.2088522 |
```
II. TEENAGE PREGNANCY

Figure 4: Teenage Pregnancy and Congressional Support for Health Reform

This is a statistically significant relationship.

```
reg sharevoted rate, robust
linear regression
Number of obs = 51
F( 1, 49) = 16.12
Prob > F = 0.0002
R-squared = 0.2539
Root MSE = .27053
```

|        | Coef.  | Std. Err. | t     | P>|t|    | [95% Conf. Interval] |
|--------|--------|-----------|-------|-------|----------------------|
| sharevoted-a | -.1133206 | .0282708 | -4.02 | 0.000 | -.170323 -.056388 |
| _cons  | .9938164 | .1199486 | 8.28  | 0.000 | .7519707 1.234862 |
Figure 5: Teenage Pregnancy\(^2\) and Republican vs. Democrat Popular Votes (2008 Election)

This is a statistically significant relationship.

```
reg ratio rate, robust
```

```
| ratioRD2008 | Coef.  | Std. Err. | t    | P>|t| | [95% Conf. Interval] |
|-------------|--------|-----------|------|-----|-------------------|
| rate 15.19  | .15557 | .0329327  | 4.72 | .000| .0893897 - .2217512 |
| _cons       | .33995 | .1300079  | 2.42 | .019| .05604 - .613987  |
```

Thanks to Sarah Cannon for econometric assistance.