**Abstract**

In this paper, I hope to reproduce and extend work done by Dr. Michael New at the University of Alabama, "Analyzing the Effect of State Level Anti-Abortion Legislation in the Post Casey Era." This paper investigates the effects of various types of anti-abortion legislation on abortion rates and ratios by examining data on abortion rates shortly before and after the enactment of anti-abortion legislation. in the 1990s. He finds substantial and significantly significant differences in abortion rates and ratios corresponding to parental involvement laws, informed consent laws, and Medicaid funding restrictions.

**Methodology**

Dr. New's study uses both widely accepted data sources on abortion: the Centers for Disease Control and Prevention (the CDC provides annual abortion figures provided by state health departments) and the Alan Guttmacher Institute (the AGI provides data from surveys abortion facilities) over a wide time range, 1985-2005. He analyzes both abortion rate (the number of abortions per 1,000 women of between ages 15 and 44) and abortion ratio (the number of abortions per 1,000 births) so that changes in population and fertility do not mask results. Additionally, he uses regression to control for factors widely believed to effect abortion rates including: availability of public funding, economic measures (per capital personal income growth and unemployment rate, and annual change in the unemployment rate, and poverty rate), racial composition, age composition, fertility rates, marriage rates, availability of abortion (abortion providers per capita and percentage of residents in metropolitan areas). Predictor variables were obtained from CDC, AGI, the US Census Bureau, the Bureau of Labor Statistics, and the Bureau of Economic Analysis. He investigates the effects of legislation on both overall abortion rates and ratios and those of the affected subgroup and he investigates differences in the effects of legislation among states where judges upheld and nullified relevant abortion restrictions.

Due to autocorrelation in the data, common in regression applied to time series data, panel corrected standard errors and a correction for autocorrelation were applied. Comparisons of models using ordinary least squares (OLS), OLS with robust standard errors, and Generalized Least Squares with a correction for autocorrelation, and with panel corrected standard errors.

**Results**

So far, I can get similar but not exactly the same results. None of the differences are significantly different. More to come.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Model 1 | | Model 2 | | Model 3 | | Model 4 | |
| Variable | Manuscript | Reproduced | Manuscript | Reproduced | Manuscript | Reproduced | Manuscript | Reproduced |
| Income Growth | -1.45 | -1.45 | -0.1 | -0.1 | -0.01 | 0.01 | -0.04 | -0.04 |
| (se) | 0.57 | 0.57 | 0.04 | 0.04 | 0.97 | 0.97 | 0.07 | 0.07 |
| Change in Unemployment Rate | 0.09 | -0.09 | 0.01 | 0 | -1.18 | -1.39 | -0.01 | -0.02 |
| (se) | 1.15 | 1.15 | 0.08 | 0.08 | 1.94 | 2 | 0.14 | 0.14 |
| Unemployment Rate | -0.87 | -0.88 | -0.06 | -0.06 | 0.47 | 0.53 | 0.08 | 0.08 |
| (se) | 0.41 | 0.41 | 0.03 | 0.03 | 2.01 | 2 | 0.13 | 0.14 |
| Poverty Rate | -0.15 | -0.16 | 0 | 0 | -0.51 | -0.52 | -0.04 | -0.04 |
| (se) | 0.51 | 0.51 | 0.03 | 0.03 | 0.87 | 0.88 | 0.06 | 0.06 |
| Percent Black | 5.72 | 5.68 | 0.48 | 0.48 | 14.73 | 14.72 | 1.08 | 1.08 |
| (se) | 3.41 | 3.41 | 0.23 | 0.23 | 3.06 | 3.05 | 0.21 | 0.21 |
| Percent Native American | -1.99 | -1.99 | -0.02 | -0.02 | 5.52 | 5.51 | 0.47 | 0.47 |
| (se) | 2.7 | 2.7 | 0.17 | 0.17 | 5.69 | 5.7 | 0.42 | 0.42 |
| Percent Hispanic | 4.95 | 4.93 | 0.17 | 0.17 | -1.34 | -1.36 | -0.23 | -0.23 |
| (se) | 1.4 | 1.4 | 0.1 | 0.1 | 1.08 | 1.08 | 0.07 | 0.07 |
| Percent Asian | -14.1 | -14.13 | -0.86 | -0.86 | -7.91 | -7.9 | -0.53 | -0.53 |
| (se) | 3.04 | 3.02 | 0.24 | 0.24 | 4.33 | 4.33 | 0.31 | 0.31 |
| Percent 20-24 | 7.94 | 7.94 | 0.53 | 0.53 | 3.71 | 3.76 | 0.01 | 0.01 |
| (se) | 5.12 | 5.12 | 0.36 | 0.36 | 4.86 | 4.88 | 0.29 | 0.29 |
| Percent 25-29 | 6.43 | 6.43 | 0.41 | 0.41 | 1.66 | 1.64 | 0.1 | 0.1 |
| (se) | 4.1 | 4.1 | 0.28 | 0.28 | 3.72 | 3.72 | 0.27 | 0.27 |
| Percent 30-34 | 7.37 | 2.67 | 0 | 0.01 | 0.93 | 0.95 | -0.09 | -0.09 |
| (se) | 6.29 | 3.96 | 0.29 | 0.29 | 4.76 | 4.25 | 0.27 | 0.27 |
| Percent 35-49 | 7.25 | 7.35 | 0.57 | 0.57 | 12.68 | 12.65 | 0.52 | 0.52 |
| (se) | 6.29 | 6.28 | 0.44 | 0.44 | 7.06 | 7.07 | 0.47 | 0.47 |
| Percent 40-44 | 14.79 | 14.81 | 1.09 | 1.1 | 2.77 | 2.84 | 0.31 | 0.31 |
| (se) | 6.33 | 6.32 | 0.46 | 0.46 | 4.88 | 4.88 | 0.36 | 0.36 |
| Fertility Rate | -3.69 | -3.67 | 0.11 | 0.11 | -2.82 | -2.8 | 0.19 | 0.2 |
| (se) | 0.66 | 0.66 | 0.05 | 0.05 | 0.8 | 0.81 | 0.06 | 0.06 |
| Abortion Providers Per Capita | 1.57 | -1.58 | -0.09 | -0.09 | 1 | 0.99 | 0.02 | 0.02 |
| (se) | 1.64 | 1.64 | 0.11 | 0.11 | 1.98 | 1.97 | 0.13 | 0.13 |
| Abortion Providers Per Capita Squared | 0.1 | 0.1 | 0.01 | 0.01 | 0.15 | 0.15 | 0.01 | 0.01 |
| (se) | 0.03 | 0.03 | 0 | 0 | 0.05 | 0.05 | 0 | 0 |
| Percent Residents in Metro Area | -0.01 | -0.01 | 0 | 0 | 0.46 | 0.45 | 0.02 | 0.02 |
| (se) | 0.04 | 0.04 | 0 | 0 | 1.03 | 1.03 | 0.06 | 0.06 |
| Percent Married | -0.04 | -0.04 | -0.01 | -0.01 | -0.65 | -0.66 | -0.03 | -0.04 |
| (se) | 0.17 | 0.17 | 0.01 | 0.01 | 2.98 | 2.99 | 0.19 | 0.19 |
| **Parental Involvement** | **-6.47** | **-6.47** | **-0.46** | **-0.46** | **-5.72** | **-5.63** | **-0.54** | **-0.54** |
| **(se)** | **4.88** | **4.88** | **0.34** | **0.34** | **6.56** | **6.58** | **0.44** | **0.44** |
| **Informed Consent** | **-10.04** | **-10.07** | **-0.74** | **-0.74** | **-16.71** | **-16.71** | **-1.1** | **-1.11** |
| **(se)** | **4.55** | **4.55** | **0.33** | **0.33** | **6.76** | **6.75** | **0.46** | **0.46** |
| **Medicaid funding Restruction** | **-20.82** | **-20.85** | **-1.54** | **-1.54** | **-19.37** | **-19.42** | **-1.44** | **-1.45** |
| **(se)** | **10.09** | **10.08** | **0.7** | **0.7** | **10.33** | **10.33** | **0.65** | **0.65** |
|  |  |  |  |  |  |  |  |  |
| R Squared | 0.968 | 0.968 | 0.969 | 0.969 | 0.99 | 0.99 | 0.991 | 0.991 |

**Appendix: Code (STATA)**

tsset fips year, yearly

Appendix B

Model 1 (CDC Data)

xtpcse wratio wy05-wy85 wzal-wzwy wpcigrow wunemploych wunemploy\_total wpoverty wblack windian whisp wasian wa20t24 wa25t29 wa30t34 wa35t39 wa40t44 wfertile wpc\_abortprovide wabortprovidesq wmetropop wmarried wparcon winfcon wpubfundban, pairwise corr(ar1)

Model 2 (CDC Data)

xtpcse wrate wy05-wy85 wzal-wzwy wpcigrow wunemploych wunemploy\_total wpoverty wblack windian whisp wasian wa20t24 wa25t29 wa30t34 wa35t39 wa40t44 wfertile wpc\_abortprovide wabortprovidesq wmetropop wmarried wparcon winfcon wpubfundban, pairwise corr(ar1)

Model 3 (AGI Data)

xtpcse wratio wy05-wy85 wzal-wzwy w\_pcigr w\_uch w\_u wrpoverty wblack windian whisp wasian wa20t24 wa25t29 wa30t34 wa35t39 wa40t44 wfertile w\_pc\_abortionprovide wabprovidesq wmetropop w\_married wparcon winform wpubfundban, pairwise corr(ar1)

Model 4 (AGI Data)

xtpcse wrate wy05-wy85 wzal-wzwy w\_pcigr w\_uch w\_u wrpoverty wblack windian whisp wasian wa20t24 wa25t29 wa30t34 wa35t39 wa40t44 wfertile w\_pc\_abortionprovide wabprovidesq wmetropop w\_married wparcon winform wpubfundban, pairwise corr(ar1)

Appendix C

Model 1 (CDC Data)

xtpcse wtnrate wy05-wy85 wzal-wzwy wpcigrow wunemploych wunemploy\_total wpoverty wblack\_tn windian\_tn wasian\_tn whispanic\_tn wfertile wpc\_abortprovide wabortprovidesq wmetropop wmarried wparcon winfcon wpubfundban, pairwise corr(ar1)

Model 2 (CDC Data)

xtpcse wadultrate wy05-wy85 wzal-wzwy wpcigrow wunemploych wunemploy\_total wpoverty wblack whisp windian wasian wa20t24 wa25t29 wa30t34 wa35t39 wa40t44 wfertile wpc\_abortprovide wabortprovidesq wmetropop wmarried wparcon winfcon wpubfundban, pairwise corr(ar1)

Appendix D

Model 1 (CDC Data)

xtpcse wrate wy05-wy85 wzal-wzwy wpcigrow wunemploych wunemploy\_total wpoverty wblack windian whisp wasian wa20t24 wa25t29 wa30t34 wa35t39 wa40t44 wfertile wpc\_abortprovide wabortprovidesq wmetropop wmarried wparcon wicnull winfcon wpubfundban, pairwise corr(ar1)

Model 2 (CDC Data)

xtpcse wtnrate wy05-wy85 wzal-wzwy wpcigrow wunemploych wunemploy\_total wpoverty wblack\_tn windian\_tn wasian\_tn whispanic\_tn wfertile wpc\_abortprovide wabortprovidesq wmetropop wmarried wpcnull wparcon winfcon wpubfundban, pairwise corr(ar1)