The Abortion Landscape:
Restrictions and Protections in the American States, 1988-2017

Introduction
Abortion policy has become more salient in the wake of U.S. Supreme Court Justice Anthony Kennedy's retirement in mid 2018, which has put reproductive rights on the line. For 30 years, Justice Kennedy served as a swing vote on a court that is deeply divided over abortion rights. During Justice Kennedy's tenure, the U.S. Supreme Court handed down more than 15 decisions related to abortion (Soto 2018, McFarlane and Meier 2001). The implications of the appointment of his successor are far reaching for abortion rights and restrictions.

While the Supreme Court has primacy in interpreting abortion law, it is often overlooked that states are the key players in developing abortion policy (Halva-Neubauer 1990). The 1973 *Roe* v. *Wade* decision that legalized abortion throughout the United States permitted considerable state discretion. This latitude was upheld and expanded in subsequent decisions, particularly, *Webster* v. *Reproductive Health Services* (1989) and *Planned Parenthood of Southeastern Pennsylvania* v. *Casey* (1992). These Court sanctions of state abortion restrictions have promulgated even more state activity (Patton 2007).

Our data show that, as of 2017, the 50 states and the District of Columbia have collectively enacted at least 447 anti-choice restrictions and 89 pro-choice protections. The sum of these state abortion laws means that the conditions under which abortion occurs vary tremendously by state. Seventeen states fund abortion for low income women, but 33 states do not. For women requesting abortion services, 32 states mandate specific counseling, which is often medically inaccurate (Daniels et al. 2016); 18 states and the District of Columbia do not. Twenty-eight states require waiting periods between the date an abortion is requested and the time a procedure is performed or the medication dispensed; 22 states and the District of Columbia have no such requirement. Forty-four states have parental-notice or parental-consent measures that restrict young women's access to abortion; six states and the District of Columbia do not. Seventeen states and the District of Columbia have laws protect abortion providers and patients from harassment and anti-choice violence; 33 states do not have these types of protections (NARAL 2018).

This study seeks to explain this variation by analyzing the landscape of abortion policies in the American states during the period 1988 to 2017. Here we analyze the determinants of aggregate state abortion policies. This focus on aggregate abortion laws is important because it reveals the overall context of abortion within individual states. This is the situation that both patients and providers encounter– abortion restrictions and protections in their totality, affecting both patient access and service provision (Llamas et al., 2018).

Research Question
What factors predict aggregate state abortion restrictions (both total and enforced) and protections?

Data and Research Findings
The data are annual from 1988 through 2017 measured at the state level, including all fifty states plus Washington D.C. The **dependent variable** is the number of abortion restrictions and abortion protections in existence under state law each year. Data on restrictions and protections were gathered from NARAL annual reports (NARAL Pro-Choice America, 1988-2018). These were supplemented by numerous internet searches to verify information on state policy adoptions.

The **independent variables** include political, economic, and demographic measures that may influence the enactment of state restrictions on abortion. We measure the impact of the state

government by partisan control of the executive and legislative branches of government and their position on the issue of abortion (NARAL Pro-Choice America, 1988-2018). We also include female representation using measures of the percent of Democratic and Republican women in the state legislature (Rutgers, 2018), as well as overall strength of female representation. Because monetary contributions to political candidates and lobbying may influence policy positions, we use total spending by pro-life (e.g. Susan B. Anthony List) and pro-choice (e.g. Emily's List) interest groups gathered from the database maintained by the National Institute on Money in State Politics. We measure the impact of religion on state policy (Association of Religious Data Archives, 2018) with a measure of the total number of religious adherents (i.e., members of a specific congregation) associated with historically pro-life religions, including Catholics and Protestant fundamentalists (e.g., Lutheran Church-Missouri Synod, Mormons, Churches of Christ, Mennonites, Southern Baptists Conservative Baptist Association). We **control** for state population and level of education measured by the percent of the states' populations with bachelor's degrees. To account for the economic conditions of the state we include state unemployment rates and median income in the state. **Table 1** shows descriptive data for the independent variables in our preliminary model.

Methods
   Cross-sectional time series analysis is used to predict the number of state abortion restrictions as well as the number of state abortion protections. Due to space constraints, we have included only one preliminary model for total abortion restrictions (**Table 2**), which does not distinguish between total (i.e., on the books) enforced (i.e., not enjoined) abortion restrictions.

Preliminary and Expected Findings
   Table 2 shows findings from our preliminary model. Among political variables tested, both pro-life governors and pro-life state houses are significant predictors of abortion restrictions. Similarly, the number of pro-life religious adherents and the amount of pro-life state spending are positively and significantly associated with more state abortion restrictions. Space constraints preclude adding another table here, but preliminary analyses show that determinants of state abortion protections differ markedly from those predicting state abortion restrictions. We expect that political variables, including spending, affect which states enforce abortion restrictions and where restrictions are enjoined.

Significance of Study
   Studying abortion laws in their totality is important because it indicates the overall context of abortion in a particular state. Moreover, "many of those seeking an abortion encounter multiple barriers simultaneously, which can exacerbate the impact of an individual restriction and leave some women unable to obtain desired abortions at all" (Llamas et al. 2018, p. 1). Only a few studies have considered aggregate abortion restrictions and protections; these studies did not employ time series analysis.
   Much of the scholarly literature addressing abortion in the states examines the impacts of state abortion restrictions (Llamas et al. 2018, Haas Wilson 1993, Meier et al. 1996). Fewer studies use state abortion policy as a dependent variable. Most of these focus on specific abortion restrictions such as parental involvement and mandatory counseling laws (e.g., Joyce et al. 2009), or funding restrictions (e.g., Meier and McFarlane 1994). Research examining the determinants of aggregate state abortion laws is much less common.

Table 1: Descriptive Statistics (N= 1,350)

Variable	Mean	Standard deviation	Minimum	Maximum
Number of State Abortion Restrictions	6.9	3.7	0	15
Number of State Abortion Protections	1.13	1.41	0	6
Governor position				
Pro-choice	37	48	0	1
Mixed	14	35	0	1
Anti-abortion	48		0	1
Governor Party Control				
Republican	54	49.9	0	1
Independent	2	14.0	0	1
Democrat	44		0	1
House position				
Pro-choice	24	42.8	0	1
Mixed	21	40.5	0	1
Anti-abortion	55		0	1
House Party Control				
Republican	46	49.9	0	1
Independent	1	11.5	0	1
Democrat	53		0	1
Senate position				
Pro-choice	23	42.3	0	1
Mixed	26	44.0	0	1
Anti-abortion	51		0	1
Senate Party Control				
Republican	49	50.0	0	1
Independent	0.1	2.7	0	1
Democrat	51		0	1
Number of Religious Adherents of Religions Identified as Prolife	733,873	834,603	10,484	5,058,275
Percent of Adults with Bachelors' Degrees	23	5.3	10.2	39.1
Median Household Income in 2016 dollars	55,345	8,823	33,481	81,018
State Unemployment Rate	5.62	1.9	2.2	13.9
Proportion of Women in State Legislature who Identify as Democrats	60.0	17.7	0	100
Proportion of Women in State Legislature who are Republicans	37.7	16.4	0	84.4
Total Number of Women in the State Legislature	33	19.9	3	159
Population (logged)	15.36515	1.074547	13.02517	18.12897
Total Spending by Prolife Interest Groups	14779.98	71,821	0	1,277,077

Table 2: Cross Sectional Time Series Negative Binomial Count Model Predicting the Total Number of State Abortion Restrictions

Variable	Coefficient	Standard Error
Governor Position		
Mixed	-0.02	0.04
Pro Choice	-0.10*	0.03
House Position		
Mixed	-0.02	0.04
Pro Choice	-0.15*	0.06
Senate Position		
Mixed	-0.02	-0.56
Pro Choice	-0.03	-0.44
Number of Pro Life Religious Adherents (1000s)	0.0005*	0.0001
Percent Bachelor's Degrees	-0.008*	0.003
Median Income (2016 Dollars, 1000s)	0.016*	0.003
State Unemployment Rate	0.034*	0.007
Proportion of Female Legislators	0.582	0.113
Number of Female Legislators	0.014*	0.002
Population (logged)	0.251*	0.035
Pro-Life Spending (2016 dollars. 1000s)	0.0003*	0.0001
Constant	13.942	158.32
Wald (chi-squared), df= 14	325.4*	

*Significant at the 5% level or better

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