What's the Plan Now? The Effect of the Dobbs Decision on Planned Parenthood Clinic Closures and Abortion Provision

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Abstract: On May 2nd, 2022, an initial draft majority opinion written by Justice Alito for the U.S. Supreme Court decision in Dobbs v. Jackson Women's Health Organization was leaked. On June 24th, 2022, the Court released its final decision, and like the draft, struck down Roe v. Wade and all federal protection for abortion. The Dobbs Decision radically changed the landscape of reproductive health in America. Using a differences-in-differences model and propensity score matching, I provide estimates on closures of Planned Parenthood clinics in response to the Dobbs Decision and how many Planned Parenthood clinics stopped providing abortions. My results show that the Dobbs Decision, on average, did not have any statistically significant results in the Propensity Score Matching sample, but did have statistically significant effects in the full sample.

Keywords: abortion, Dobbs, Planned Parenthood, reproductive health

Acknowledgements: I would like to dedicate this paper to Professor Carolina Castilla, for her continued guidance and grace, and my loved ones, especially those affected by the Dobbs Decision.

1. Introduction

On May 2nd, 2022, an initial draft majority opinion written by Justice Alito was leaked. The leaked draft was a disavowal of Roe v. Wade, a landmark court case in 1973 that set a precedent

for abortion as a constitutional right. On June 24th, 2022, the Supreme Court of the United States overturned Roe v. Wade and revoked the constitutional right to abortion. Both the leaked draft and the final decision declared Roe to be "egregiously wrong", removed all federal protections for abortions, and left the legislation of abortion to state governments (Dobbs v Jackson Women's Health Organization 2022).

In the US, available access to abortion has improved women's health outcomes (Hawkins et al. 2020, 8), educational attainment (Angrist and Evans 2000, 27-8; Jones and Pineda-Torres 2022, 23), labor force participation (Kalist 2004, 512), and earnings (Dench et al. 2023, 2). Restricted abortion access has been found to have negative impacts on women's health and child outcomes. This includes increased maternal deaths (Hawkins et al. 2020, 8; Vilda et al. 2021, 1701), infant mortality (Karletsos et al., 2021, 4), low birth weight and preterm birth (Wallace et al., 2017, 5-6).

Dayle Steinberg, CEO of Planned Parenthood Southeastern PA, claims that Planned Parenthood is "the single-entity abortion provider in the country" and for many patients, "their only source of healthcare" (Gantz, 2022). There is empirical evidence to back up this claim. In 2015, a 20% reduction in the number of Planned Parenthood clinics increased maternal mortality by 6% to 15% across racial and ethnic groups (Hawkins et al. 2020, 8). 45 maternal deaths could have been avoided had clinics not closed between 2007 to 2015 (Hawkins et al. 2020, 8).

The Dobbs Decision can have a direct impact on abortion access. Trigger laws are laws passed by states banning abortion conditional on the fall of Roe v. Wade. Immediately after the Dobbs Decision, these trigger laws went into effect. In states with these trigger bans, medical clinics providing abortion access faced the decision to close, move, or stop providing abortion services (Bui et al. 2022). Clinics in other states faced uncertainty about a rapidly changing legislative landscape. However, the direction of the decision's effect on the number of abortion providers and the services they provide is unclear. On the one hand, in states that have passed or are currently passing anti-abortion legislation, abortion clinics may close, stop providing certain services including contraceptive services, or be forced to arrange additional meetings with patients before they can provide abortions. However, residents of these states who are seeking abortions could travel to states where abortion remains legal. In response, providers could open new clinics in strategic locations near borders, leading to an increase in abortion clinics (Myers 2023, 2). An example of this is the Planned Parenthood clinic in Ontario, a town by the Idaho-Oregon border. Thus, in this paper, I seek to examine the effect of the Dobbs Decision on access to abortion. I will focus on these supply-side outcomes, first, the likelihood of a Planned Parenthood clinic closing, and second, the likelihood of a Planned Parenthood clinic stopping abortion services.

I collected data on all Planned Parenthood clinics within the United States and the services they provided between May 2nd, 2019, and May 2nd, 2023, using archived versions of official Planned Parenthood clinic listings accessible through the Wayback Machine. Additionally, I collected data on all abortion-related legislation at the state level in the same time frame. I use this data to examine the causal effect of the Dobbs Decision on abortion access using a differences-in-differences empirical strategy. I will use a state and year fixed effect linear probability differences-in-differences model to estimate the effect at the clinic level. Simultaneously, I also use a two-way fixed effect model to estimate the effect at the aggregated state level. For the primary analysis, states with a trigger law or a pre-Roe ban, regardless of whether or not the ban's been enjoined, are in the treatment group, and the rest is in the control group. To test for robustness, we will have states assessed to be either "Most Restrictive", "Very Restrictive" or "Restrictive" by the Guttmacher Institute (2022) are in the treatment group, while the rest is in the control group.

This paper contributes to the literature in a few ways. This paper's first contribution is the data. The data track contain whether or not a clinic closed, in addition to the status of their abortion services. These include such as HRT, birth control, and morning-after pills, between 2019 and 2023. This dataset will allow further in-depth studies of service provision and more general reproductive health access in the future. Additionally, the paper is one of the first to examine the Dobbs Decision and its effects on reproductive health service providers. My results show that the Dobbs Decision had a positive and insignificant effect on the number of clinics in a given treated state but a negative and significant effect on abortion provision among these clinics, though the statistical significance of this effect varies by model. The linear probability estimation shows that the Dobbs Decision did not have a statistically significant effect on the likelihood of a clinic being open or closed. The same is true for the likelihood of an open clinic ceasing abortion services. My state-level analysis shows that the Dobbs Decision led to, on average, an 18.55% decrease in the number of clinics that provided abortions in a treatment state. This finding adds to the existing literature in that it explores what would happen when barriers to passing abortion restrictions are removed, and states are free to restrict abortions, as opposed to the existing literature on the effect of direct restrictions.

2. The Leak, Dobbs Decision and a Post-Roe world

On May 2nd, 2022, a draft of the majority opinion written by Justice Samuel Alito was leaked to the public. The draft outlines the court's decision to overrule two landmark cases, Roe v. Wade (1973) and Planned Parenthood v. Casey (1994). Roe v. Wade (1973) established the right to abortions prior to fetal viability (Center for Reproductive Rights 2023). In the draft, Justice

Samuel Alito decried Roe as "egregiously wrong" and having had "damaging consequences." More than a month later, the Supreme Court of the United States struck down both Roe and Casey. In overturning these precedents, the Court has dismantled all federal protection of abortion rights and, in Justice Alito's words, returned "the authority to regulate abortion [...] to the people and their elected representatives" (Dobbs v. Jackson Women's Health Organization 2022).

The decision allowed states to freely enact and enforce abortion regulations. When Roe fell, 13 states had already passed trigger bans – laws that, in the case that Roe v. Wade fell, would outlaw abortions under virtually all circumstances (Guttmacher Institute 2022). These 13 states are Arkansas, Idaho, Kentucky, Louisiana, Mississippi, Missouri, North Dakota, Oklahoma, South Dakota, Tennessee, Texas, Utah and Wyoming. Many states are moving to pass new bans: Alabama, West Virginia, and Indiana, for example, have passed near-total bans since the decision (Guttmacher Institute 2023). In contrast, other states are reinforcing abortion protections. States such as Minnesota, California, Illinois, Vermont, Ohio and New Jersey have enshrined the right to abortions into their constitutions (Center for Reproductive Rights 2023). States such as New York, Connecticut, Maryland and Hawaii have a network of state laws that protect abortion and other reproductive health services. The timing of each state's legislative reaction varied greatly due to the difference in each state's legal processes, even among states with trigger bans. For instance, Indiana's ban came into effect on August 1st, 2023 (Center for Reproductive Rights 2023). North Dakota's total ban, despite being a trigger ban, officially took effect on April 24, 2023 (Center for Reproductive Rights 2023). South Dakota's trigger ban, on the other hand, was enforced immediately on June 24th, 2022.

3. Literature Review

There is a significant body of literature that focuses on the effects of policy-induced clinic closures on abortion access and health outcomes. Firstly, previous studies have outlined how clinic closures could have significant effects on access. Measuring how clinic closures caused by Texas HB2 affected abortion rates and birth rates, Lindo et al (2019, 3) found that an increase in travel distance to the nearest clinic from under 50 miles to 50 to 100 miles reduces abortions by 16%, and the effect of increased distance declined the larger the initial nearest travel distance was. Nearly 12,000 more abortions would have been carried out had these reductions in access not taken place. Since the researchers found no statistically significant effect on birth rates, there is a possibility that Texas women either reduced risky sexual behaviors or resorted to selfmedicated abortions in Mexico (Lindo et al. 2019, 17-20). Using the same methodology and research design, Venator and Fletcher (2020) conducted a similar study in Wisconsin. They examined how the closures of two out of five clinics in Wisconsin, a consequence of three laws targeting providers between 2010 and 2017, affected abortion rates and birth rates (Venator & Fletcher 2020, 28-9). Consistent with Lindo's et al paper, Venator and Fletcher (2020, 3) found that on average, a 100-mile increase in distance reduced abortion rates by 30.7%, with declines growing smaller as the initial distance to the nearest clinic grows larger. This paper also revealed that clinic closures' effects are 1.33 times larger with the presence of laws that increase the number of required physician visits to get an abortion (Venator & Fletcher 2020, 3-4).

There is also a body of literature examining the effects of different Targeted Regulations on Abortion Providers, or TRAP laws, on health outcomes, separate from closures. Colman and Joyce (2011) examined the WRTK Act enacted in Texas, 2004. The WRTK Act, which stands for Women's Right To Know, required all abortions at or past the 16-week mark to be performed in an ambulatory surgical center. None of Texas' 54 nonhospital providers met the requirements for an ambulatory surgical center at the time (Colman & Joyce 2011, 776). The WRTK Act led to an 88% decrease in the number of late-term abortions in-state in the first year, and while out-ofstate late-term abortions quadrupled, they did not offset the in-state decline (Colman & Joyce 2011, 794-5). Though the target audience for this policy is small, the magnitude of the effect is larger than other forms of legislation (Colman & Joyce 2011, 795). Fischer, Royer, and White (2018) explored the effects of reductions in funding and Medicaid reimbursements for publicly funded family planning services on fertility. They found that having no publicly funded family clinic within 25 miles is associated with a 1.2% increase in births that are conceived 12 months from the time at which access is measured (Fischer et al. 2018, 37). Lindo and Pineda-Torres (2021) studied a Tennessee law enacted in 2015 that requires a trip to abortion providers for state-directed counseling 48 hours or more before obtaining an abortion. They found that Tennessee's mandatory waiting periods caused significant delays in abortion, specifically a 48% to 73% increase in the share of abortions obtained in the second trimester (Lindo and Pineda-Torres 2021, 4). The delay could increase the cost of getting an abortion by up to \$900 for each person seeking an abortion (Lindo & Pineda-Torres 2021, 5).

Finally, there are works that hypothesized, and now study, what would happen nationwide if Roe v. Wade fell. In 2019, Myers, Jones, and Upadhyay predicted that if Roe v. Wade were to be struck down, abortion rates would fall 40% in urban areas in high-risk states, and 12.8% nationwide, amounting to 118,554 women being prevented from obtaining abortions (Myers et al. 2019, 6). A recent paper by Dench, Pineda-Torres, and Myers studied the Dobbs Decision and its effect on fertility using provisional natality data from the CDC (2023). They saw that births increased by 2.3%, on average, in states with total abortion bans when compared to states where abortion rights are protected (Dench et al. 2023, 4).

4. Data Description

a. Planned Parenthood Clinics

As mentioned in the introduction, according to the CEO of Planned Parenthood Southeastern PA, Planned Parenthood is the single largest provider of reproductive health and abortion services (Gantz, 2022). The outcome variables for my linear probability model are whether a Planned Parenthood clinic is open in a given year and whether a Planned Parenthood clinic provided abortions in a given year. The outcome variables for my aggregated state-level differences-indifferences analysis are the number of Planned Parenthood clinics in a given state and year, and the percentage of those Planned Parenthood clinics that provided abortions in a given state and year.

I collected data on the Planned Parenthood clinics in operation between 2019 and 2023 and the range of services that they provided. I did this by first checking official online listings of Planned Parenthood clinics currently open. Then, I looked for archived versions of these listings through the Wayback Machine, an archive of what these listings looked like from 2019 to 2023. This allowed me to check when a clinic opened, when and if it closed, as well as when and if it stopped providing abortions. I cross-checked these listings with Yelp reviews, news articles, and clinic tracking operations from both pro-abortion and anti-abortion groups. This resulted in a dataset that contains the number of Planned Parenthood clinics operating in each state between 2019 and 2023, as well as the proportion of these clinics that provided abortions.

b. Additional State Level Data

Estimates of each state's population and percentage of population that were female, black, white, Native American, Asian, Pacific Islander and mixed race were taken from the Census Bureau Estimates from 2018 to 2022 (Census 2010 – 2020; Census 2020 – 2022). This, as well as all other control variables, are lagged.

Estimates of state GDP are taken from the Bureau of Economic Analysis (U.S. Bureau of Economic Analysis 2018 – 2022). GDP per capita is constructed by dividing state GDP by the state populations collected above.

I control for which party controls each state's government, what proportion of each state legislature is taken up by women, and what proportion of each state legislature is taken up by Democrat women. The data is taken from the National Conference of State Legislatures (2018 – 2022) and the Center for American Women and Politics (2018 – 2022). I include these controls due to the literature on political determinants of supply-side abortion legislation (Medoff & Dennis 2011; Medoff 2012; Kreitzer 2015).

c. Year

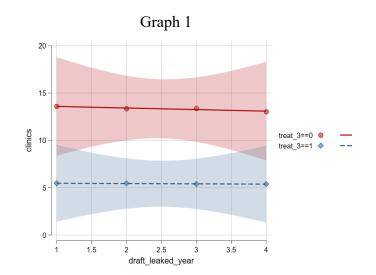
For the outcome variables, a year is defined from May of one year to May of the next, instead of a calendar year to account for the leak of the draft opinion on May 2nd, 2022. Here, the post year encompasses May 2nd, 2022, to May 2nd, 2023. A clinic is included in a state's count in a given year if it was opened in and remained open till the end of the year, or had remained open throughout that given year. The same applies to abortion services.

5. Summary Statistics

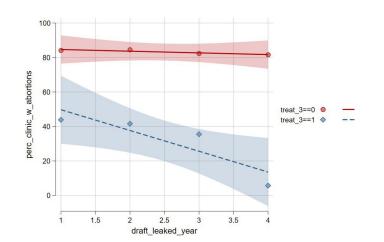
a. Outcome Variables

Graph 1 and 2 contains the average number of Planned Parenthood clinics and the percentage of those clinics that provide abortions respectively, over time across treatment and control states. They show that the number of clinics that provide abortions in both the control and treatment

group are trending down. The Dobbs Decision seem to not have a clear effect on the number of clinics overall, but did have an effect on the proportion of these clinics that provide abortions. Both graphs show a parallel trend pre-treatment.







b. Control Variables

Table 1 shows the summary statistics of all variables included in the model. All the variables are included as is, with the exception of State Population and GDP per Capita, which are included in their natural log forms.

	Full	Sample			Tre	atment			Cont	rol		
	N	Mean (SD)	Min	Max	N	Mean (SD)	Min	Max	N	Mean (SD)	Min	Max
Planned Parenthood Clinics	200	11.28	0	112	52	5.423	0	33	148	13.338	0	112
		(17.352)				(8.619)				(19.116)		
% of Clinics Offering Abortions	188	71.12	0	100	44	31.646	0	100	144	83.182	0	100
		(39.131)				(40.644)				(29.660)		
State Population (Natural Log)	200	15.211	13.265	17.493	52	14.935	13.265	17.191	148	15.308	13.344	17.493
		(1.016)				(1.013)				(1.003)		
GDP per Capita (Natural Log)	200	10.962	10.517	11.383	52	10.879	10.517	11.257	148	10.991	10.627	11.383
		(0.182)				(0.184)				(0.173)		
% of Women in State	200	50.406	47.299	52.045	52	50.226	48.476	51.502	148	50.47	47.299	52.045
		(0.821)				(0.852)				(0.803)		
% of White in State	200	78.609	25.07	95.516	52	80.79	58.665	95.516	148	77.842	25.07	95.087
		(12.316)				(10.407)				(12.864)		
% Women in Legislature	200	28.7	11.1	100	52	21.1	11.1	31.4	148	31.4	11.9	61.9
		(8.7)				(4.9)				(8.2)		
Republican Control	200	0.385	0	1	52	0.673	0	1	148	0.284	0	1
		(0.488)				(0.474)				(0.452)		

Table 1 – Summary Statistics

Number of States

50

Number of Years

4

6. Empirical Strategy

This paper uses 2 models. The first, hereon known as Model A, is a linear probability differences-in-differences model to estimate the effect of the Dobbs Decision on the likelihood that a Planned Parenthood clinic closes, or an existing Planned Parenthood clinic stops providing abortions. The second, hereon known as Model B, is a differences-in-differences model estimating the Dobbs Decision's effect on the number of clinics in a state, and the proportion of those clinics that provide abortions. The equation is the same for both models.

$$Y_{c,s,t} = \beta_1 treat_s * post_t + \beta_2 treat_s + \beta_n X_{s,t} + \alpha_s + \beta_t + \mu_{s,t}$$

In Model A, $Y_{c,s,t}$ is either a binary variable, *Open*, which takes the value 1 when the clinic is open that year, and 0 if the clinic was closed at any point during that year, or a binary variable, *Abortions*, which takes the value 1 if the clinic provided abortions that year, and 0 if the clinic didn't provide abortions that year. In Model B, $Y_{s,t}$ is either the number of clinics in a state in a given year, or the percentage of the clinics in a state that provides abortions in a given year. α_s are clinic-fixed effects, and $X_{c,t}$ includes all control variables. Control variables include the natural log of state population, the natural log of GDP per Capita, percentage of population that is female, white, black, Native American, Asian, Native Hawaiian/Pacific Islander, and mixed, percentage of legislators in legislatures that are female and female Democrats, and dummy variables for whether a state is controlled by the Democratic Party, the Republican Party, or split between the two. Control variables are lagged. For control variables, estimates for year 1 are taken from 2018, year 2 from 2019, year 3 from 2020, and year 4 from 2021.

Control and treatment are assigned based on the existence of Pre-Roe total bans and trigger laws. Treatment states include Arkansas, Idaho, Kentucky, Louisiana, Mississippi, Missouri, North Dakota, Oklahoma, South Dakota, Tennessee, Texas, Utah and Wyoming. Every other state is a control state. Additionally, I use Propensity Score Matching by baseline control characteristics between states to further reduce the sample size in an additional regression. The function of the Propensity Score Matching is as follows,

$$treat_s = \beta_0 + \beta_1 X_i$$

Where X_i stands for baseline control variables. $treat_s$ is a state's propensity score, which stands for how likely a state is to be treated. States with a propensity score that is higher than the minimum propensity score of the treatment group, and lower than the maximum propensity score of the control group are included in this reduced sample. The propensity score matching eliminates the states that would have always been treated and states that would never have been treated, and focuses the analysis on states that would likely have experienced change due to the Dobbs Decision. This reduced sample, from hereon, will be called the Propensity Score Matching Sample. The states within this sample are Pennsylvania, Wisconsin, Alaska, Alabama, Montana, Indiana, South Carolina, Missouri, Idaho, Louisiana, Tennessee, Arkansas, South Dakota, Texas, North Dakota, Utah, Mississippi, and Kentucky.

When conducting the analysis for abortion provision, I only include clinics that are open. While Dobbs provides exogenous variation in the timing in which abortion protections were removed at a national level, the adoption of laws that ban abortion at the state level does not.

7. Results

I will first use a linear probability differences-in-differences model that accounts for state- and year-fixed effects, which I will call Model A. I estimate two outcome variables with this model – the likelihood a clinic is open and the likelihood an open clinic ceases abortion services. I will then use a two-way fixed effect differences-in-differences model to estimate the Dobbs

Decision's effect on the number of clinics in a state, and what percentage of those clinics provide abortions. This I call Model B.

a. Model A - Linear Probability Model

The results in Table 2 show no statistically significant effect caused by the Dobbs Decision on the likelihood of a clinic being open or closed for the Propensity Score Matching Sample. However, for the full sample, we see a clear indication that the Dobbs Decision increased the likelihood of a clinic opening.

1 able 2 – Results for Model A	/		(2)	(4)
	(1)	(2)	(3)	(4) Feell Control
VARIABLES	No Controls –	Full Controls	No Controls –	Full Controls
	PSM Sample	-PSM	Full Sample	– Full Sample
		Sample		
Treat*Post	0.0432*	0.0497	0.0402**	0.0423**
field foot	(0.0234)	(0.0297)	(0.0164)	(0.0179)
Natural Log of State Population	(0.0251)	2.247*	(0.0101)	-1.174*
Natural Eog of State I opulation		(1.239)		(0.595)
% Women		-0.131***		0.00326
70 Wollien		(0.0447)		(0.0303)
% White		0.00323***		0.00125*
78 White		(0.000473)		(0.000731)
Natural Lag of CDD non-consta		0.906***		()
Natural Log of GDP per capita				0.321
		(0.240)		(0.260)
Republican Control		-0.0532		-0.0177
		(0.0305)		(0.0158)
% Women in Legislature		-0.701		-0.379
		(0.454)		(0.305)
Constant	1.011***	-33.19*	1.012***	13.16
	(0.0127)	(16.29)	(0.0103)	(9.088)
Observations	597	597	2,457	2,457
R-squared	0.082	0.090	0.055	0.059
	Standard errors in	parentheses		

Table 2 – Results for Model A, Outcome Variable = Open

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

No statistically significant effect is found in Table 3 for the likelihood of clinics ceasing abortion services once we add all the control variables, both in the Propensity Score Matching Sample and the Full Sample.

	(1)	(2)	(3)	(4)
VARIABLES	No Controls –	Full Controls	No Controls –	Full Controls
	PSM Sample	-PSM	Full Sample	– Full Sample
	*	Sample	*	
Treat*Doct	0.0222	0.0218	-0.0666	0.0252
Treat*Post	-0.0333 (0.0639)	0.0218	(0.0418)	-0.0252
Natural Log of State Population	(0.0039)	(0.0464) 0.501	(0.0418)	(0.0362) -1.873**
Natural Log of State Population				(0.786)
% Women		(2.652) -0.175		-0.0569*
76 women		(0.161)		(0.0309)
% White		0.00684**		0.00240
70 White				(0.00198)
Natural Log of CDD non conite		(0.00251) 0.153		-0.0329
Natural Log of GDP per capita		(1.048)		
Donublican Control				(0.220)
Republican Control		0.0315		-0.0145
0/ Waman in Lagislatura		(0.0554)		(0.0128)
% Women in Legislature	-	0.832		0.402*
	1 020444	(1.059)	1 002***	(0.203)
Constant	1.030***	0.102	1.002***	29.08**
	(0.0163)	(35.99)	(0.00887)	(11.52)
Observations	563	563	2,457	2,457
R-squared	0.400	0.405	0.513	0.515

Table 3 – Results for Model A, Outcome Variable = *Abortions*

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

b. Model B – Aggregate State-Level Model

The results in Table 4 show a positive, statistically significant at the 10% level effect on the number of clinics in a state in the full sample, but no significance in the Propensity Score Matching Sample.

	(1)	(2)	(3)	(4)
VARIABLES	No Controls –	Full Controls	No Controls –	Full Controls
	PSM Sample	-PSM	Full Sample	 Full Sample
		Sample		
Treat*Post	0.719	0.693	0.363	0.520*
	(0.473)	(0.483)	(0.242)	(0.275)
Natural Log of State Population		-10.45		-18.90**
		(6.251)		(7.807)
% Women		-0.827		-0.0604
		(0.688)		(0.617)
% White		0.355		-0.289

Table 4 – Results for Model B, Outcome Variable = Number of Clinics

	Standard amagin			
Number of States	18	18	50	50
R-squared	0.226	0.295	0.048	0.111
Observations	72	72	200	200
	(0.0493)	(99.46)	(0.0390)	(131.7)
Constant	7.648***	158.2	11.36***	311.4**
		(2.706)		(1.716)
% Women in Legislature		2.313		0.601
		(0.120)		(0.181)
Republican Control		-0.153		-0.103
		(3.408)		(4.840)
Natural Log of GDP per capita		1.842		1.187
		(0.381)		(0.351)

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

The results in Table 5 show that the Dobbs Decision had a statistically significant effect at the 5% level, negative effect on the percentage of clinics in a state that provides abortions within the full sample. Here, we see that it, on average, led to a 27.55 point decrease in the percentage of clinics that provide abortions in a given treated state. However, in the Propensity Score Matching Sample, there are no statistically significant effect.

	(2)		(4)
No Controls –	Full Controls	No Controls –	
PSM Sample	-PSM	Full Sample	– Full Sample
Ĩ	Sample		
-25.42	-20.54	-32.53**	-27.55**
(16.56)	(13.61)	(12.16)	(10.69)
	-523.4		-310.8
	(692.3)		(229.1)
	32.42		9.123
	(39.35)		(10.94)
	-25.05		-13.01*
	(17.49)		(6.471)
	-119.9		-45.48
	(289.9)		(56.08)
	6.336		0.584
	(8.196)		(1.846)
	15.11		21.22
	(127.7)		(37.24)
52.16***	9,634	73.55***	5,879
(2.219)	(10,327)	(0.813)	(3,702)
	(1) No Controls – PSM Sample -25.42 (16.56) 52.16***	$\begin{array}{cccc} (1) & (2) \\ \text{No Controls} - \\ \text{PSM Sample} & \text{Full Controls} \\ - & \text{PSM} \\ & \text{Sample} \\ \hline & -25.42 & -20.54 \\ (16.56) & (13.61) \\ & -523.4 \\ (692.3) \\ & 32.42 \\ (39.35) \\ & -25.05 \\ (17.49) \\ & -119.9 \\ (289.9) \\ & 6.336 \\ (8.196) \\ & 15.11 \\ (127.7) \\ & 52.16^{***} & 9,634 \end{array}$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$

Table 5 – Results for Model B, Outcome Variable = % of Clinics w/ Abortions

Observations	68	68	188	188
R-squared	0.251	0.353	0.244	0.314
Number of States	17	17	47	47

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

8. Robustness Check

To test for robustness, I ran these same models for different services provided by Planned Parenthood, including birth control services, morning after pills, STD treatment and vaccines, and pregnancy testing services. However, within the analysis period, there was no change in birth control services. The analysis for the proportion of clinics providing morning after pills, STD treatment and vaccines and pregnancy testing services shows no statistically significant results. Therefore, any changes in service provision is likely driven by closures, rather than cessation of specific services. The regression results are shown in table 6, 7, and 8. The results in table 6 and 7 are the same because the samples are the same.

9. Conclusion

We continue to see new developments in the landscape of abortion legislation at the state level. Amidst all this change, the long-term effects of which are yet to be observed, Planned Parenthood and other abortion providers, alongside abortion seekers, have been the first to have to grapple with an increasingly complex web of legislative shifts concerning not just abortion, but reproductive health in general. Using a comprehensive database of Planned Parenthood clinic operations across the nation from 2019 to 2023 and two differences-in-differences models, this paper examines the Dobbs Decision's effect on how many Planned Parenthood clinics there are in a given state, how many of them provide abortions, how likely it is that a clinic closes, and how likely it is that an open clinic ceases abortion services. My primary analysis indicates that the Dobbs Decision, on average, had no statistically significant effect in the Propensity Score Matching sample, but statistically significant effects when including the full sample of states. This might indicate that the states excluded by the Propensity Score Matching back into the analysis, especially ones that are not of the treatment group, are likely expanding their services and opening new clinics to brace for the long term impacts of the Dobbs Decision. There were no changes in service provision that are found.

This analysis could benefit from a more complex identification strategy that could better capture the heterogeneous timing of each state's policy reactions to the Dobbs Decision. Future studies could use this data to examine many more service-related questions, such as questions related to changes in Planned Parenthood's provision of HRT. Additionally, with finalized data for the first six months of 2023, future studies could also examine how birth outcomes are affected by the Dobbs Decision, and how trends in birth outcomes could influence which clinics are closed, which services they decide to provide, and where new clinics are established.

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U.S. Bureau of Economic Analysis, "SAGDP9N Real GDP by state"

Appendix: Robustness Checks

Table 6 – Results for Model B, Outcome Variable = STD Treatment and Vaccines							
	(1)	(2)	(3)	(4)			
VARIABLES	No Controls –	Full Controls	No Controls –	Full Controls			
	PSM Sample	-PSM	Full Sample	– Full Sample			
	_	Sample		_			
Treat*Post	1.136	1.238	1.033	1.098			
fileat 1 0st	(0.848)	(0.931)	(0.756)	(0.803)			
Natural Log of State Population	(0.040)	-4.340	(0.750)	-2.861			
		(13.11)		(5.108)			
% Women		0.0463		-0.0173			
		(1.383)		(0.347)			
% White		-0.404		-0.159			
		(0.501)		(0.135)			
Natural Log of GDP per capita		0.915		0.881			
		(6.752)		(1.557)			
Republican Control		0.253		0.0793			
-		(0.262)		(0.0609)			
% Women in Legislature		-3.110		-0.588			
		(5.175)		(0.782)			
Constant	99.33***	185.4	99.76***	147.3			
	(0.125)	(217.5)	(0.0442)	(89.24)			
Observations	68	68	188	188			
R-squared	0.164	0.191	0.149	0.160			
Number of States	17	17	47	47			

Table 6 – Results for Model B, Outcome Variable = STD Treatment and Vaccines

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Table / – Results for Woder B, Outcome Variable – Freghuncy Testing Services						
	(1)	(2)	(3)	(4)		
VARIABLES	No Controls –	Full Controls	No Controls –	Full Controls		
	PSM Sample	-PSM	Full Sample	 Full Sample 		
	_	Sample	_	_		
Treat*Post	1.136	1.238	1.033	1.098		
	(0.848)	(0.931)	(0.756)	(0.803)		

Table 7 – Results for Model B, Outcome Variable = *Pregnancy Testing Services*

[&]quot;Women in State Legislatures 2021." Center for American Women and Politics. Accessed December 9, 2023. https://cawp.rutgers.edu/women-state-legislatures-2021.

Natural Log of State Population		-4.340		-2.861
		(13.11)		(5.108)
% Women		0.0463		-0.0173
		(1.383)		(0.347)
% White		-0.404		-0.159
		(0.501)		(0.135)
Natural Log of GDP per capita		0.915		0.881
		(6.752)		(1.557)
Republican Control		0.253		0.0793
		(0.262)		(0.0609)
% Women in Legislature		-3.110		-0.588
-		(5.175)		(0.782)
Constant	99.33***	185.4	99.76***	147.3
	(0.125)	(217.5)	(0.0442)	(89.24)
Observations	68	68	188	188
R-squared	0.164	0.191	0.149	0.160
Number of States	17	17	47	47

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Table 8 – Results for Model B, Outcome Variable = Pregnancy 7	Testing Services
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	(1)	(2)	(3)	(4)
VARIABLES	No Controls –	Full Controls	No Controls –	Full Controls
	PSM Sample	-PSM	Full Sample	 Full Sample
		Sample		
		0.050		
Treat*Post	0.303	0.352	0.275	0.295
	(0.301)	(0.323)	(0.267)	(0.282)
Natural Log of State Population		6.901		1.407
		(6.340)		(1.730)
% Women		1.208		0.271
		(1.063)		(0.252)
% White		-0.646		-0.162
		(0.561)		(0.150)
Natural Log of GDP per capita		-2.356		-0.00688
		(2.704)		(0.385)
Republican Control		0.00933		0.0269
•		(0.0523)		(0.0254)
% Women in Legislature		0.946		-0.266
C		(1.229)		(0.337)
Constant	99.82***	10.51	99.94***	77.49**
	(0.0442)	(87.10)	(0.0156)	(29.41)
Observations	68	68	188	188
R-squared	0.100	0.213	0.091	0.116
Number of States	17	17	47	47

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1