



Abortion ballot measures affect election outcomes[☆]

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ABSTRACT

In the 2022 U.S. midterm elections, Democratic candidates lost fewer than predicted seats and stymied an expected red wave. News coverage and polling data represent this surprise Democratic success as a result of voters' response to the Supreme Court overturning *Roe v. Wade*. Using county-level vote data, we find that the decrease in Republican vote margin in 2022 can be explained by demographic and economic factors. However, relative to the national average, the Republican vote margin decreased by 4.8 percentage points more in states with abortion-related ballot measures. Our results indicate that abortion ballot measures have effects on election outcomes of a magnitude large enough to determine competitive races.

1. Introduction

The 2022 U.S. midterm election was expected to be a “red wave” with Republicans gaining substantial seats in both the Senate and the House of Representatives. This expectation is consistent with prior midterm elections in which the incumbent party has lost an average of 28 House seats between 1934 and 2018 (Woolley, 2022). High inflation in 2022 furthered the expectation of a red wave (Olorunnipa, 2022). These predictions were consistent with the theory that people vote retrospectively based on the incumbent party's performance, with midterm elections serving as a referendum of voters' satisfaction with economic conditions (Healy and Malhotra, 2013; Tufte, 1975). Contrary to predictions, Democrats maintained control of the Senate and lost only 9 House seats in the 2022 election.

One explanation for this outcome is the response to the Supreme Court decision in *Dobbs v. Jackson Women's Health*. In June 2022, the Supreme Court overturned *Roe v. Wade*, removing federal protections for abortion and potentially mobilizing votes for Democrats in the midterm election. Two days following the November election, the front page of *The New York Times* headlined, “How Democrats Used the Abortion Debate to Hold Off a Red Wave” (Lerer and Dias, 2022). Democrats nationwide certainly embraced abortion as a campaign issue: by late September, they were estimated to have spent \$124 million on abortion-related ads, nearly 20 times the amount spent on such ads in the 2018 midterms (Peoples and Kessler, 2022). In addition to increased

emphasis on abortion policy, 5 states included abortion-related measures on the ballot that may have affected voting behavior. These ballot measures may have further boosted local Democratic campaigns' emphasis on abortion or increased the salience of the issue enough to affect overall voting behavior.

This paper is the first to use nationwide, county-level data on voter turnout and party votes to assess the effect of the *Dobbs* decision and subsequent abortion ballot measures on the 2022 midterm election. Comparing 2022 outcomes to prior midterms, we find an overall decrease in Republican vote margin in House elections. However, after controlling for demographics and economic factors, the Republican vote margin in 2022 does not differ from prior midterm elections. Though we cannot test for a *Dobbs* effect directly, this finding suggests that the Democrats' success in 2022 may be attributable to observable factors, such as more college educated voters, and not the abortion policy debate.

However, we find that abortion ballot measures resulted in election outcomes that differed from the nationwide trend in 2022. In states with abortion ballot measures, the Republican vote margin decreased by 4.8 percentage points more than the nationwide average in 2022, relative to prior midterms. To put this magnitude in perspective, the vote margin in House elections nationwide was 3.18 percent in 2022, and there were 36 House seats with election margins of <4.8 percent. In the wake of the *Dobbs* ruling, states are increasingly turning to direct democracy to determine abortion policy. In 2024, 10 states had abortion related

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measures on the ballot. While further research is needed to understand the effects of abortion ballot measures in presidential election years, our results highlight the importance of ballot measures in determining election outcomes.

2. Data and methods

We use county-level U.S. House returns to construct four outcome variables for measuring voter behavior: voter turnout (total votes / voting age population), Republican vote margin (Republican vote share – Democratic vote share), Republican vote share (Republican votes / total votes), and Democratic vote share (Democratic votes / total votes) (Leip, 2024).

We categorize states into one of four categories depending on their abortion policy environment as of the 2022 midterm: *Safe*, *Ban*, *On Ballot*, and *At Risk*. *Safe* states either have laws explicitly protecting abortion or have legal abortion with low risk of a future ban based on the state's political environment. *Ban* states have laws banning abortion at 15 weeks gestation or less. *At Risk* states either have an unenforced ban currently undergoing legal challenges or a political environment indicating abortion is at risk of being banned depending on the election outcome. *On Ballot* states have an abortion-related ballot measure on the same day and ballot as the 2022 midterm election.¹

There were five states with abortion-related ballot measures in November 2022: California, Michigan, and Vermont had ballot measures to protect abortion access. Montana had a “born alive” ballot measure that was related to the debate surrounding abortion but did not explicitly restrict abortion. Kentucky had an abortion ballot measure to restrict abortion.²

Our empirical approach compares voting behavior in 2022 to voting behavior in 2010 and 2014, and then tests whether this difference varies by abortion policy category. We intentionally limit the comparison group to recent midterm elections with a sitting Democratic president.³ It is well-documented that voting behavior differs across presidential and midterm years and that midterm elections favor the non-Presidential party (Tufte, 1975; Charles and Stephens, 2013; Jacobson, 2023).

To motivate our analysis, we first show that vote shares on abortion ballot measures are correlated with shifts away from Republican votes. Fig. 1 uses county-level data to compare the share of ballot votes to protect abortion rights with the change in the Republican vote margin in 2022 relative to an average of 2010 and 2014. A 1 percentage point increase in votes to protect abortion is associated with a decrease in the Republican vote margin of 0.51 percentage points. This negative relationship is present regardless of whether the ballot measure is to protect or restrict abortion.

We use a two-step approach to measure the effects of abortion ballot measures. We first estimate differences in voting behavior in the 2022 election relative to prior midterm elections,

$$Y_{ct} = \beta_0 + \beta_1 I(2022)_t + \beta_2 Uncontest_{ct} + \beta_3 X_{ct} + \gamma_s + \epsilon_{ct} \quad (1)$$

where $I(2022)_t$ is an indicator for the 2022 election, $Uncontest_{ct}$ indicates for every county and year whether the House race was uncontested with a Republican or Democratic candidate, X_{ct} are county-by-year demographic and economic controls and γ_s represents state fixed effects.

¹ See Appendix B for a full explanation of each state's categorization. We use information from Ballotpedia.org and the *New York Times'* Abortion Tracker for categorizations (McCann and Schoenfeld Walker, 2022).

² Kansas additionally voted on an abortion ballot measure in an August 2022 primary. We drop Kansas from all analyses. We also drop Alaska since redistricting makes 2022 elections outcomes in Alaska difficult to compare to prior years.

³ In Appendix Table A1, we show results are robust to including 2018 data with a 2018 year fixed effect to control for the Republican president.

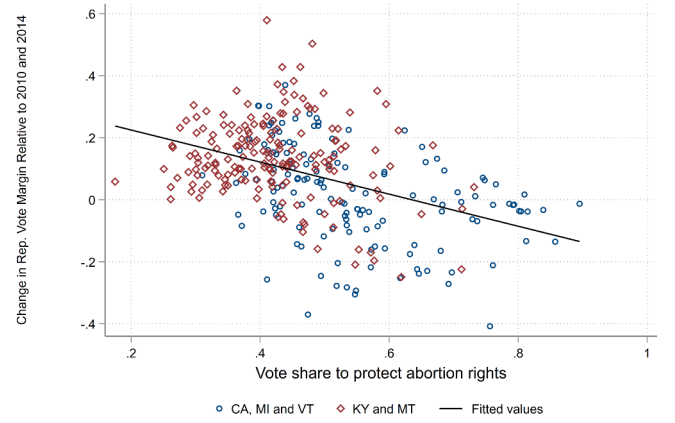


Fig. 1. Ballot measure votes and change in Republican vote margin. Notes: This figure shows the correlation between ballot vote shares to protect abortion rights in 2022 and the change in Republican vote margin in 2022 relative to an average of 2010 and 2014. A vote is considered as protecting abortion rights if it is in favor of the ballot measure in California, Michigan or Vermont, or against the ballot measure in Kentucky and Montana. Counties in *On Ballot* states with higher vote share to protect abortion rights also had a decrease in Republican vote margin. The correlation coefficient for the fitted values is -0.517 (s.e. 0.061).

Demographic and economic controls include county-year population share female, white, Black, Hispanic, age 18–29, 30–49, 50–64, and 65+, population share with a college degree, natural log of population density, unemployment rate, real median income, and poverty rate.⁴

β_1 can be interpreted as the difference between 2022 election voting behavior relative to average voting behavior across the 2010 and 2014 elections. Standard errors are robust and clustered at the state level. When analyzing turnout, we weight regressions by county-year voting age population. When analyzing vote margin and vote shares, we weight regressions by county-year total votes, as is standard in the literature (Mas and Moretti, 2009; Shue and Luttmer, 2009; Crane et al., 2024).

We estimate differences in voting behavior in 2022 within each abortion policy category relative to prior midterm elections, and compare this to the overall 2022 effect estimated in Eq. (1),

$$Y_{ct} = \alpha_0 + \alpha_1 Abortion2022_s * I(2022)_t + \alpha_2 Uncontest_{ct} + \alpha_3 X_{ct} + \gamma_s + \epsilon_{ct} \quad (2)$$

$$\delta_A = \widehat{\alpha_{1A}} - \widehat{\beta_1} \quad (3)$$

where $Abortion2022_s$ is a categorical variable representing the state's abortion policy environment in 2022. Other variables are defined as in Eq. (1). δ_A is the vector of coefficients of interest and describes whether a given abortion policy environment results in voting behavior that differs from the national average.

We then evaluate whether the effects of state abortion policies vary with demographic composition. Prior studies have argued that young voters, female voters, and voters with a college degree turned out to vote for Democrats in response to the *Dobbs* ruling (Amos and Middlewood, 2024). For each demographic group of interest, we repeat our main analysis, adding a term to interact $I(2022)_t$ in Eq. (1) and $Abortion2022_s * I(2022)_t$ in Eq. (2) with the demographic composition as a moderator variable. We then compare the coefficients on these interaction terms, as with Eq. (3) in our main analysis, to estimate whether the moderator effect within each abortion category differs from

⁴ In Appendix Table A1, we additionally control for candidate incumbency status and prior midterm abortion ballot measures.

the 2022 overall moderator effect.⁵

3. Results

Table 1 presents results for turnout and Republican vote margin. Relative to 2010 and 2014, voter turnout was 7 percentage points higher in 2022, but there was no difference in turnout by abortion policy category (column 1). Nationwide, the Republican vote margin decreased by 3.39 percentage points. The decline in Republican vote margin was larger by 3.4 ppt in counties with abortion ballot measures, relative to the national average (column 3).

The increase in turnout persists when controlling for demographic and economic factors and the differences by abortion category remain small and insignificant (columns 2). After including controls, the direction of estimates for Republican vote margin switches and becomes insignificant. One possible explanation for this finding is that shifting demographic composition, including more college educated voters, more Hispanic voters, and more Black voters, favored Democrats.⁶ However, states with abortion ballot measures still have a statistically significant decrease in Republican vote margin of 4.8 percentage points

Table 1
Abortion Access Category, Voter Turnout, and Vote Margin.

	Turnout		Rep % - Dem %	
	(1)	(2)	(3)	(4)
<i>Eq. (1)</i>				
2022	0.0700*** (0.00654)	0.0916*** (0.00806)	-0.0339*** (0.0121)	0.0283 (0.0226)
<i>Eq. (3)</i>				
Safe - 2022	-0.0029 (0.0086)	-0.0052 (0.0078)	-0.0197 (0.0167)	-0.0086 (0.0147)
Ban - 2022	-0.0047 (0.0112)	-0.0042 (0.0094)	0.0394 (0.0245)	0.0253 (0.0172)
On Ballot - 2022	-0.0002 (0.015)	0.009 (0.0166)	-0.0341* (0.0188)	-0.0485*** (0.0153)
At Risk - 2022	0.0124 (0.013)	0.0117 (0.0114)	0.0026 (0.0157)	-0.0056 (0.0143)
Observations	9018	9018	9018	9018
Controls		X		X

Notes: This table shows the differences in turnout and Republican vote margin in 2022 relative to 2010 and 2014, and whether turnout and Republican vote margin differ by states' abortion category relative to the national average. Columns (1) and (2) are weighted by voting age population. Columns (3) and (4) are weighted by total votes. All regressions include state fixed effects. Standard errors are robust and clustered at the state level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

⁵ Specifically, we estimate the following three equations:

$$Y_{ct} = \beta_0 + \beta_1 I(2022)_t * Mod_{ct} + \beta_2 I(2022)_t + \beta_3 Mod_{ct} + \beta_4 Uncontest_{ct} + \beta_5 X_{ct} + \gamma_s + \epsilon_{ct} \quad (4)$$

$$Y_{ct} = \alpha_0 + \alpha_1 Abortion2022_s * I(2022)_t * Mod_{ct} + \alpha_2 Abortion2022_s * I(2022)_t + \alpha_3 Mod_{ct} + \alpha_3 Uncontest_{ct} + \alpha_4 X_{ct} + \gamma_s + \epsilon_{ct} \quad (5)$$

$$\delta_A = \widehat{\alpha_{1A}} - \widehat{\beta_1} \quad (6)$$

⁶ See Appendix Table A3.

over the nationwide change (column 4).⁷ To further understand these patterns, we evaluate the effects on partisan vote shares. Results are shown in Table 2. Relative to the national average, Republican vote share is lower and Democratic vote share is higher in states with abortion ballot measures, though magnitudes are larger and more significant for lower Republican vote share.

It could be possible that unobservable factors in the five ballot measure states are contributing to the effects we observe. In Appendix Table A2, we drop one ballot state at a time to show that results are not driven by one specific state. Further, because the ballot measures in our sample include both protections and restrictions for abortion, it is less likely that the presence of a ballot measure is related to pre-existing trends towards Democratic votes.

Finally, we assess whether effects differed in counties with higher share female, young, or college educated voters. Results are presented in Fig. 2. Counties with a higher population share female had a differential increase in turnout in *On Ballot* and *At Risk* states. Higher female population share is also associated with an additional decrease in Republican vote margin of 1.7 ppt in *On Ballot* states and 2.0 ppt in *At Risk* states. In contrast, higher share female is associated with relatively lower turnout in *Safe* states.

4. Discussion

While we find that there was an overall increase in turnout and a decrease in Republican vote margin, the decrease in margin can be explained by demographic change and economic factors. These results question on-going news coverage and political strategy arguing that the abortion debate is a deciding factor in current elections (Weisman and Epstein, 2023; Long et al., 2024). However, we find that abortion ballot measures affect election outcomes. We also find evidence of larger effects in counties with higher share female, suggesting that part of this effect may be due to higher female turnout in ballot states.

Table 2
Abortion Access Category and Partisan Vote Shares.

	Rep %		Dem %	
	(1)	(2)	(3)	(4)
<i>Eq. (1)</i>				
2022	-0.0120* (0.00627)	0.0177 (0.0108)	0.0219*** (0.00621)	-0.0106 (0.0121)
<i>Eq. (3)</i>				
Safe - 2022	-0.0072 (0.0082)	-0.0019 (0.0072)	0.0125 (0.0087)	0.0067 (0.0078)
Ban - 2022	0.0183 (0.0113)	0.0105 (0.0081)	-0.021 (0.0138)	-0.0148 (0.01)
On Ballot - 2022	-0.0229*** (0.0087)	-0.0303*** (0.009)	0.0111 (0.0107)	0.0182** (0.0078)
At Risk - 2022	0.0037 (0.0091)	-0.0012 (0.0081)	0.0011 (0.0073)	0.0045 (0.007)
Observations	9018	9018	9018	9018
Controls		X		X

Notes: This table shows the differences in Republican and Democratic vote share in 2022 relative to 2010 and 2014, and whether vote shares differ by states' abortion category relative to the national average. All regressions include state fixed effects and are weighted by total votes. Standard errors are robust and clustered at the state level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

⁷ In Appendix Table A1, we show that these results are robust to dropping uncontested elections, controlling for candidate incumbency status, controlling for abortion ballot measures in prior midterms, and including 2018 data.

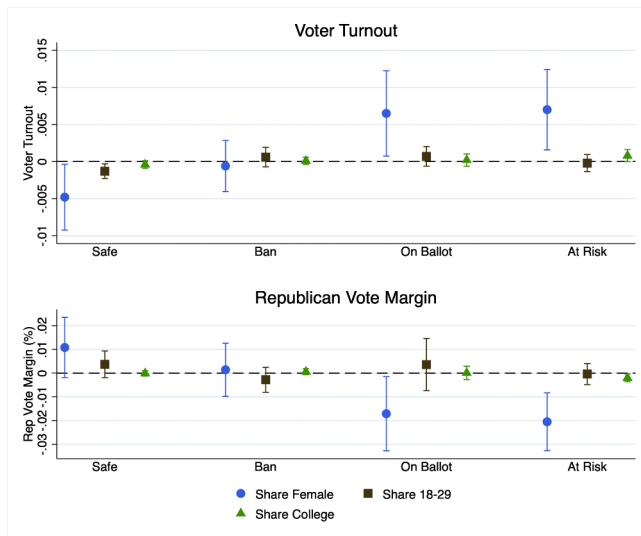


Fig. 2. Heterogeneity analysis. Notes: This figure shows how the effect of a county's demographic composition on turnout and Republican vote margin differs by state abortion category, relative to the overall effect of the demographic composition in 2022. Turnout regressions are weighted by voting age population and vote margin regressions are weighted by total votes. All regressions include state fixed effects and the full set of demographic and economic controls. Standard errors are robust and clustered at the state level. 90 percent confidence intervals are shown.

This paper is related to the economic literature documenting large effects of abortion access on fertility, maternal health, infant health, and financial outcomes (Dench et al., 2024; Farin et al., 2024; Miller et al., 2023; Gardner, 2024). Given these effects, it is reasonable that abortion policy might mobilize voters, consistent with our findings for states with ballot measures. However, it is surprising that we find no broader change in 2022 after the inclusion of controls. It could be that the voters most affected by abortion restrictions are those who would vote Democratic regardless of abortion policy.

This paper is also related to the literature on ballot referendums and voting behavior. Evidence from pre-2010 elections show that ballot measures on topics such as same-sex marriage increase turnout (Garretson, 2014; Grummel, 2008; Tolbert et al., 2001). Other studies evaluate which demographic groups turn out to vote for ballot measures (Madio and Principe 2023; Matsa and Miller, 2019). This paper contributes to this literature by documenting the importance of abortion ballot measures in the outcomes of recent elections.

Our results clarify conflicting evidence in studies relying on survey data or administrative data from a single state. Surveys of the 2022 election indicate that abortion was an important issue for voters, but other issues, such as inflation, were more important (Radcliffe, 2022; Kirzinger et al., 2022). Comparisons of 2020 and 2022 surveys suggest that abortion opinions led to vote switching away from Republican candidates (Mutz and Manfield, 2024; Kann et al., 2024). Further survey evidence shows that the *Dobbs* ruling made abortion a more important issue for voters but did not affect their intended voting behavior (Baum et al., 2022). Sommer et al. (2023) study North Carolina and show that there was an increase in voter registration among women and Democrats after the ruling. Amos and Middlewood (2024) use voter registration data and precinct-level election results to study the effects of Kansas' August 2022 abortion ballot measure. They find that the abortion ballot measure mobilized voters, especially women, young people, and college-educated voters, but these voters did not vote in the November 2022 election. This is consistent with our results suggesting that abortion ballot measures affect election outcomes, but the abortion debate more broadly may not.

Supplementary materials

Supplementary material associated with this article can be found, in the online version, at [doi:10.1016/j.econlet.2025.112182](https://doi.org/10.1016/j.econlet.2025.112182).

Data availability

The data that has been used is confidential.

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