Anatomy of the Political Divide over Abortion: Policy vs. Outcomes

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Abstract:

Abortion is a divisive issue among Americans. We seek to understand the causes of this division and whether there is room for unity even in such a divisive setting by conducting a large conjoint survey (N=1,921 participants) that simultaneously measures preferences over both government abortion policy and potential consequences these policies might have. A large yet asymmetric partisan divide exists in preferences for bans and their potential societal consequences: Democrats are more united against a national ban than Republicans are united for it, and Democrats care more about the policy (opposing abortion bans) while Republicans care more about societal outcomes (wanting the actual number of abortions to go down). Further, support for an abortion ban is strongly connected to the consequences people would expect the ban to have. These findings provide clear guidelines for both partisan political messaging, as well as a path towards finding unity over abortion: while highlighting the potential negative consequences of a national ban has the potential of uniting the country against such a ban, no analogous strategy for uniting in favor of such a ban exists.

Keywords: Abortion policy, preference measurement, political preferences, choice-based conjoint analysis, multi-attribute preferences

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1.   Introduction

American politics currently reflects a strongly divided country. We adapt a marketing research method to better understand the underlying preferences that drive a particularly polarizing issue – abortion. Most polls regarding abortion ask respondents about the policy itself, for example "Should abortion be legal in most cases?" (Pew 2024, AP-NORC 2023). We propose an adaptation of conjoint analysis for measuring preferences over both the policy and the specific consequences it might have. Specifically, we study the preferences of Americans for a national abortion ban (defined as an abortion ban after 6 weeks of pregnancy) as a function of consequences for societal outcomes such a ban might have (such as the annual number of abortions and maternal deaths that occur). To measure these preferences, we use a choice-based conjoint analysis survey which asks participants what version of America they would prefer to live in, with the country versions differing both in terms of the extent of abortion bans and in terms of the societal outcomes related to abortion. By design, the outcomes do not systematically co-vary with the bans in the survey, so the method can measure how individual people trade off abortion policies against potential consequences of the policies.

We find that the preferences are generally stable over time and exhibit a large partisan divide in preferences for both the abortion policy and its key potential consequence: the number of abortions that occur annually. The divide is not as simple as Republicans being against abortion while Democrats being for it. Instead, we find that Republicans do not want abortions to happen, but they do not agree on banning them. Democrats, on the other hand, agree that they do not want abortion bans, but they do not agree whether the number of abortions that actually occurs annually in the U.S. should be reduced, increased, or kept the same.

To quantify the impact of the estimated preferences on the overall support for a national abortion ban and the partisan divide in this support, we use counterfactual simulations from a choice model estimated on our survey data. The simulations pit a version of America that has no bans against abortion for the first 26 years of pregnancy (which was the law of the land before the U.S. Supreme Court overturned this guarantee in the 2022 *Dobbs* case) against a version of America with a national ban that has various consequences. Our main finding is that the support for a ban depends strongly on the consequences people expect the ban to have. Specifically, we show that the percentage of Americans who prefer to live in a version of the country with a national abortion ban can either increase by a third or decrease by half depending on which consequences people consider likely. This sensitivity of preferences suggests that consistent messaging about consequences of abortion bans can have a large effect on the Americans' support for a national ban. However, the implied support for a ban remains below a majority in all our scenarios with difference consequences, consistent with existing polling that finds abortion bans unpopular (e.g. AP-NORC Center for Public Affairs Research 2023).

The support for a national ban described in the previous paragraph is highly polarized along partisan lines. To understand the utility antecedents of this partisan divide, we break down the pure policy preference (i.e., a preference for policy without considering any consequences) for a national ban (with exceptions for rape, incest and a mother's health) by party. We find that Democrats are strongly opposed to the ban with only 9 percent of them preferring a ban, but Republicans are not symmetrically in favor: only 57 percent of them would prefer such a ban over having no ban. The results thus indicate that Democrats are more motivated against a national ban than Republicans are motivated for it. When we the add potential consequences to the version of the country with a ban, support for the ban among Republicans rises to 69 percent when the ban eliminates abortions, but falls to only 29 percent when the ban only has adverse consequences. Democrats, on the other hand, remain strongly against the ban regardless of the consequences it might have. The large swings in Americans' preference for a national ban as a function of different consequences are therefore mostly driven by preferences swings among Republicans.

One thing members of both parties agree on is that they believe that any abortion bans need exceptions for rape, incest or the health of the mother. Democrats and Republicans also agree on how undesirable potential adverse consequences of abortion ban (increase the number of maternal deaths, unwanted births, and children growing up in single-parent households) would be. Highlighting these negative consequences thus has the largest potential of uniting the country against a ban. No such route exists for uniting the population for a ban, even when we consider a set of proactive government policies designed to ease the burden of raising children.

2. Method and Data

2.1 choice-based conjoint analysis survey

We use a choice-based conjoint analysis survey, which has been used in widely in both marketing (Cattin & Wittink 1982, Green et al 2004) and political science (e.g. Hainmueller et al 2014, Shapiro et al 2024). The main conceptual goal of our design is to capture how Americans make the tradeoffs between policies and outcomes related to abortion. To accomplish this goal, the main choice task in the survey asks participants to imagine different possible versions of the United States, and choose which version of the world they would prefer to live in – a novel choice task in the literature that applies conjoint analysis to politics.[3] Each version of the United States is described by attributes which capture both policies (e.g. Abortion laws) and societal outcomes (e.g. Annual number of deaths from pregnancy complications), with personal income tax and control of federal government added as features that are *a priori* important but not necessarily related to abortion. Thus, unlike most previous conjoint analyses that have focused only on what

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[3] The choice of which country to live in applies conjoint analysis to political questions, and tends to use hypothetical voting as the key task (e.g. Franchino and Zucchini 2015, Horiuchi et al 2018, Thomadsen et al 2023).

products people want when they shop (i.e., in our survey, the policies people vote for), our choice task is able to measure both what products consumers want as well as what they are hoping to accomplish with the products (i.e., in our survey, the societal outcomes).

A key advantage of conjoint surveys over conventional polls about abortion bans is that conjoint analysis includes multiple additional attributes of the world we live in (in our case, societal outcomes and other policies), and thus does not suffer from focalism bias (e.g. Schkade and Kahneman 1998). Further, conjoint analysis allows researchers to compare the magnitude of weights respondents put on different attributes. This allows us to compare how important a policy stance is relative to the importance of potential consequences of that policy.

Table 1 shows the attributes in the survey along with a summary of the range of levels of each attribute. Table S1 in the Appendix lists the exact levels we use. To make sure our participants understood what we meant by each attribute, we introduced each attribute and its levels in detail on a separate pages upfront, in a random order between subjects. These descriptions, along with the rest of the survey, are available at Open Science Foundation:[4]

Table 1: Attributes in the choice-based conjoint survey

Attribute	Level range summary (exact levels in Appendix)
Government Control	From Democratic control of both congress and the presidency to mixed party control to Republican control of both
Your income taxes	From $4000 decrease to $4000 increase
Abortion policy	From no bans to bans in subsets of states to a national ban, interacted with the extent of the ban (complete vs. with exceptions)
Maternity leave	Leave with a job guarantee upon return. From none to 3 months unpaid to 1 pear paid.
Childcare subsidy eligibility	From None to means-tested to universal
What age does public school start	From 3 (universal preschool) to 5 (kindergarten age)
Annual number of abortions in the US	From None to half of current level to double current level
Number of unwanted births per year	From None to 3 million
Number of maternal deaths	Defined as "women who die due to complications with pregnancy per year." From None to half of current level to double current level
Percentage of single-parent households	From 15% to 25% (current level) to 35%

Our profiles are implemented using a partially randomized design developed by Sawtooth Software, and we estimate individual-level preferences using a standard Hierarchical Bayes Multinomial Logit Model (HB-MNL). To allow a rich heterogeneity in preferences, we estimated the upper level of the hierarchy with four covariates: age, gender, political party, and education (see the Appendix for more technical details). The HB-MNL approach allows us to both calculate the relative importance weights individuals place on different attributes, and to perform counterfactual simulations for measuring the effect of jointly changing multiple attributes (such as abortion policies and their potential outcomes).

Each participant answered 20 partial-profile conjoint choice tasks, as illustrated in Figure 1A of the Appendix. We used Sawtooth Software to design the tasks participants encountered, administer, and analyze the survey.[5] While it clearly limits the cognitive burden on the subjects, the partial profile design also has a disadvantage: it assumes that subjects follow our instruction to "assume the candidates' policies are the same on all other issues not shown" and do not engage in actively imputing the levels of attributes not shown (see Bradlow et al 2004 and Rao 2004 for more details on the limitations of partial-profile conjoint analysis).

After showing each participant 20 conjoint tasks, we asked several demographic questions, including questions about age, gender, ethnicity, party affiliation, income, education, religion and religiosity, the type of media subjects consumed, and voting behavior. A complete copy of the surveys is included available at Open Science Foundation.[2]

2.2 Participant sampling

Using the Connect panel by Cloud Research,[6] we surveyed a sample from the general U.S. population in three waves: 1) the weekend before the 2022 midterm election (starting November 5, 2022), 2) the weekend after the 2022 midterm election was called by the AP (starting November 19, 2022), and approximately a year later (starting on December 9, 2023). Some subjects answered the survey repeatedly, but for the purposes of this paper we analyze each person whenever they are first encountered since we found that preferences for abortion were mostly stable across time.[7] In order to ensure that our participants actually paid attention to the survey, we eliminated the 5% fastest participants in each survey round, as well as about

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[5] 16 of the tasks were so-called "random tasks" left completely up to the software, 3 tasks were so-called "fixed tasks" designed by us to isolate the impact of government control on preferences, and one task (always administered last) was an attention-check task that involved a dominated alternative (the two versions were the same except for the dominated one involving double the number of maternal deaths and unwanted births).
[6] https://connect.cloudresearch.com/
[7] The 2022 midterm election was an important event in its own right (Jacobson 2023), and a companion paper focuses on the within-subject analysis of repeat respondents, and it documents subtle effects the election had on preferences tangential to the cross-sectional questions relevant to the partisan divide studied here. Broadly speaking, the companion paper finds that preferences are stable over the time period we study, so a simple cross-sectional analysis we present here is valid. We nevertheless control for survey wave whenever possible.

an additional 3% of participants who failed our attention-check task described in footnote 2. Both elimination criteria were pre-registered.[8]

The above sampling and data-integrity procedures resulted in 1,921 qualified subjects (1,031 from before the election, 469 right after the election, and 439 a year later). The demographics of the sample are presented in Table S1 in the Appendix, and it is evident they are not perfectly representative of the U.S. population as a whole. We used the self-reported vote in the 2020 Presidential election to create individual weights that balance all summary statistics reported herein to be unbiased predictors of the respective preferences in the U.S. population. This weighted scheme is applied throughout our analysis.[9]

3. Results

We begin by describing importance weights that capture how much importance each individual places on the different attributes in Table 1 when they make the choice of their preferred version of America.[10] Figure 1 shows the average importance weights by self-reported party affiliation.[11] The error bars represent 95% confidence intervals. Using the conservative Bonferroni correction[12] to correct for the fact that we are conducting ten statistical tests of difference between Democrats and Republicans in Figure 1, the difference between the partisans is highly statistically significant at the at less than 1 percent level for number of abortions, abortion policy, and income tax (see the OSF Repository[2] for data and statistical test behind Figure 1).

It is immediately clear that Democrats and Republicans differ markedly in the importance they place on the abortion policy and the number of abortions that occur annually in the U.S (the two attributes boxed in Figure 1), and that independents are usually somewhere in between the partisans, except for the fact that they place less importance on which party controls the federal government.

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[8] https://aspredicted.org/9qv9m.pdf

[9] We weight each respondent who voted for candidate j by $\frac{ActualVotes_j}{SampleVotes_{j,k}}$ where $ActualVotes_j$ reflects the actual fraction of the population voting for j (Biden, Trump, a third-party candidate, or not voting), and $SampleVotes_{j,k}$ is the fraction of respondents in survey wave k (1 = before election, 2 = after election) that report voting for j. The fractions voting for each candidate in each wave are shown in Table S2 in the Appendix.

[10] See the Appendix for a definition of Importance Weights.

[11] We analyze the importance of other demographics in shaping abortion preferences in Table S3 in the Appendix, which shows the linear regression of individual importance weights for abortion policy and number the of abortions on several demographics. The largest differences in both importance weights among participants is from party affiliation. These effects dwarf the effects of gender, voting status, media consumption, and being from a state that had some ban in force at the time of the survey. We conclude that partisanship is the main driver of individual differences in importance weights of the two key attributes.

[12] The Bonferroni correction (Bonferroni 1936, explained well in VanderWeele and Mathur 2019) is a simple and robust method for controlling the probability of rejecting the null hypothesis of no difference between two groups (a "Type I error") when multiple comparisons between the two groups are conducted. Since we conduct ten comparisons between Republicans and Democrats in Figure 1, the Bonferroni correction that keeps the overall "familywise" Type I error rate across all the comparisons at 5 percent is to reject the null hypothesis whenever the simple p-value of one of the comparisons is below 0.05/10=0.005.

Figure 1: Importance weights by party affiliation
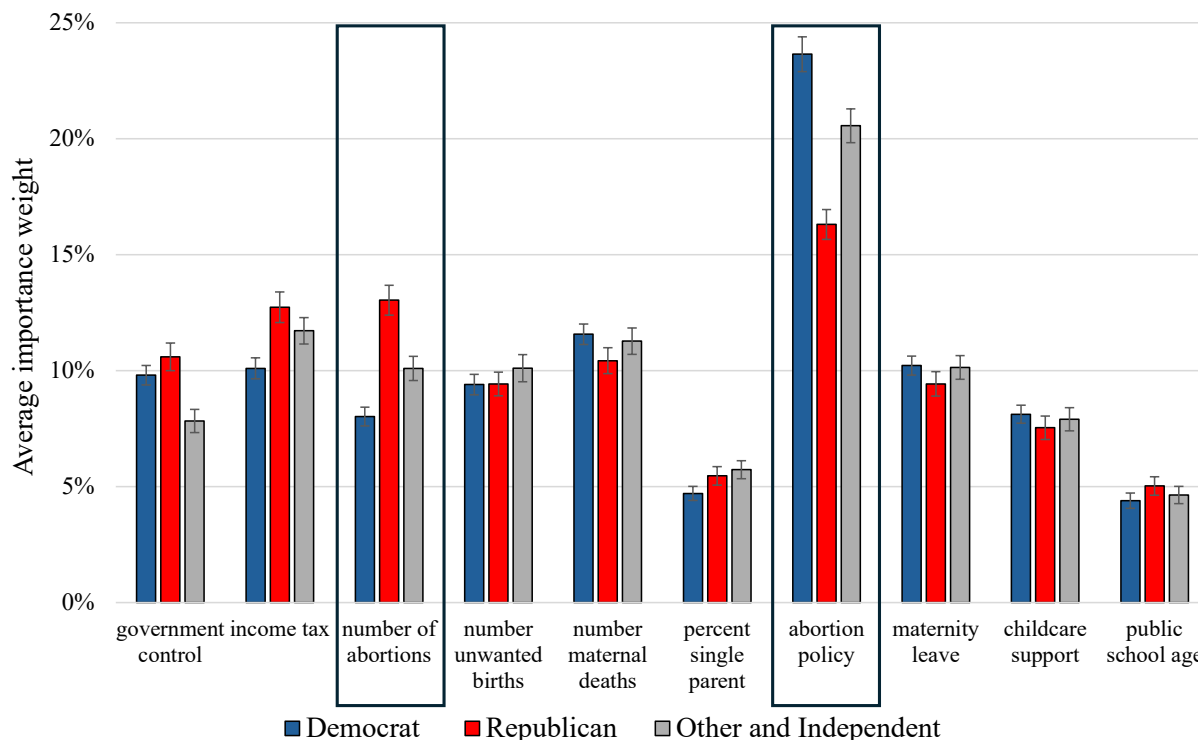
In our divided political environment, perhaps the similarities between the parties are as important as the differences. We observe that both Democrats and Republicans are similar in terms of how important unwanted births or number of maternal deaths are. Thus, disagreements over abortion policy are not the result of one party caring more about these severe outcomes than the other party.

While the importance weights reveal how important differences between levels of an attribute are to respondents, they are silent regarding the preferred level of an attribute within each group. Figure 2 shows the distribution of the most preferred levels[13] of the two attributes that have the largest partisan differences in importance weights: abortion policy and number of maternal deaths.

It is immediately clear from the left panel of Figure 2 that most Republicans (63%) prefer abortions to be reduced all the way to zero, but no such agreement on a preferred level of the attribute exists among Democrats. Independents are somewhere in the middle, leaning towards reducing the number of abortions. On the other hand, the right panel paints a mirror image when it comes to abortion bans: most Democrats (72%) prefer no ban at all, but no such agreement exists among Republicans, although a clear plurality (38%) prefer a national ban of some sort. Overall, Independents mostly resemble Democrats in their

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[13] Each person is represented by their 5000 MCMC draws, so Figure 2 accounts for the estimation uncertainty by allocating the fraction of draws of each person's preferences that would reflect their choice to that alternative.

preferences towards a ban, with a majority (55%) opposed to any ban. Another notable pattern apparent from the right panel of Figure 2 is that, conditional on the geographical extent of the ban, more people in each group seem to prefer a ban with exceptions over one with no exceptions (Republicans and national ban are the only exception to this pattern). In contrast to these two attributes, Republicans and Democrats agree that maternal deaths, percentage of children growing up in single-parent households, and the number of unwanted births should be reduced.[14]

Figure 2: Anatomy of the partisan divide on abortion policy and its societal outcomes
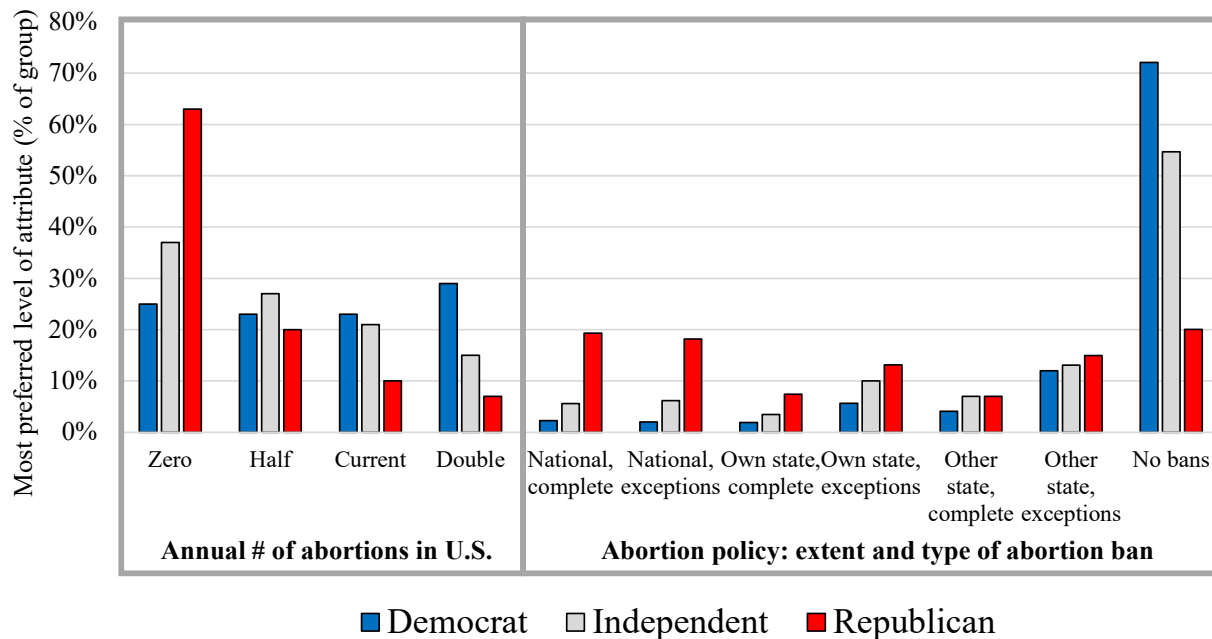
Taking above the results together, we can summarize the results as showing that Republicans oppose abortions but are not united against bans, while Democrats oppose bans but are not united against abortions. Further, Democrats and Republicans generally agree on the importance and preferred level of the other potential consequences, so these differences are not driving different opinions about the optimal policy.

The conjoint analysis we do allows us to go further than just look at the importance weights or part worths – namely, it allows us to simulate what fraction of people would support one version of America over another version. By asking including attributes about outcomes as well as policies, we can observe how much changing the outcomes of a policy would change support for it.

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[14] Most preferred level of each attribute is the lowest level for both partisans. Specifically, minimizing maternal deaths is the favorite level of 84% of Democrats and 69% of Republicans, minimizing the number of unwanted births is the favorite level of 74% of Democrats and 55% of Republicans, and minimizing the percentage of children in single-parent households is the favorite level of 56% of both Democrats and Republicans.

In our simulations, we focus on a <u>national</u> ban with exceptions for rape, incest and health of the mother, hereafter called "ban with exceptions," and consider how the fraction of support for such a ban would change under four situations:

1) It has no change in the societal outcomes we measure.

2) It ends all abortions in the U.S. without any negative consequences.

3) It does not change the number of abortions that occur, but doubles the number of maternal deaths, and increases both the number of unwanted births (by 1 million),[15] and the proportion of children growing up with single parents (by 10 percent).

4) It has both the reduction in abortions described in 2 and the negative consequences described in 3.

Note that we do not argue which, if any, of the above potential consequences are the most likely. Instead, we use the changes shown above to illustrate the consequences respondents could conceive of occurring, and examine the effect of these different potential consequences on preferences for a ban.

We estimate the fraction of support for the ban by using a multinomial logit functional form assumed in our estimation,[16] and evaluating the probability that each respondent would choose the version of America with a ban over a version without a ban. We take the weighted average of these probabilities across all draws across a group of respondent to get an unbiased estimate of the support for a ban within that group, as described previously.

Consistent with existing polling (e.g. AP-NORC Center for Public Affairs Research 2023), our simulations imply that a ban with exceptions), keeping all societal outcomes equal, is supported by only 26% of Americans over allowing abortions for the first 26 weeks of pregnancy (which was the case in the pre-*Dobbs* America). But when the ban is bundled with consequences, the preferences can shift markedly. For example, a ban that completely eliminates abortions in the U.S. would be supported by 34% of Americans – an increase of 8 percentage points, largely driven by Republicans who care more about reducing the number of abortions than about banning the procedure. On the other hand, a ban that would not change the number of abortions, but would increase the number of maternal deaths, unwanted births, and children growing up in single-parent households would have support only of 12% of the population. Finally, a ban that both eliminates all abortions and also brings all of the adverse consequences would be supported by 23% of Americans. Thus, we find that in the popular support for a national abortion ban is sensitive to what the respondents believe the consequences of the ban would be. However, despite the fairly

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[15] This should more than cover the number of additional unwanted births. For reference, the CDC estimates that in 2021 there were 626,000 abortions in the U.S. See https://www.cdc.gov/mmwr/volumes/72/ss/ss7209a1.htm (accessed May 19, 2024).

[16] If respondent i's utility from a country with a ban is U_{Bi}, while their utility from a country without a ban is U_{Ai}, then the probability the respondent prefers the version with a ban is $\frac{exp(U_{Bi})}{exp(U_{Bi})+exp(U_{Ai})}$.

significant range of outcomes considered in our four simulated counterfactuals, we still observe that support for an abortion ban would only range between 12% and 34% - far below majority support. We now turn to the partisan divide that underlies these population-level averages.

Figure 3 shows the fraction of support for a national abortion ban by party affiliation. The error bars represent single-test 95% confidence intervals. When we consider the "pure policy" preference for a ban that does not have any of the four societal consequences considered above, we find that Democrats are strongly opposed to the ban with only 9% of them preferring the version of America with it, while Republicans are split with 57% of them preferring a national ban with exceptions over having no bans. These numbers quantify the extent of partisan divide documented on the right side of Figure 2 in terms of choice probabilities. If we add the consequence of having zero abortions with the ban then Republican support for the ban increases to 69%. More surprisingly given their diffuse preferences, the Democrats' support also increases, albeit only by a few percentage points to 14%. On the other hand, if we pair the abortion ban with only negative consequences (as described in scenario 3 above), we observe that the ban becomes quite unpopular, with only 29% of Republicans and 2% Democrats supporting a ban. When we include all of the consequences (scenario 4), support for a ban is a little lower than support for a ban under scenario 1 (48% for Republicans and 5% for Democrats).

Figure 3: Impact of potential consequences on the preference for a new version of America that has a national ban with exceptions
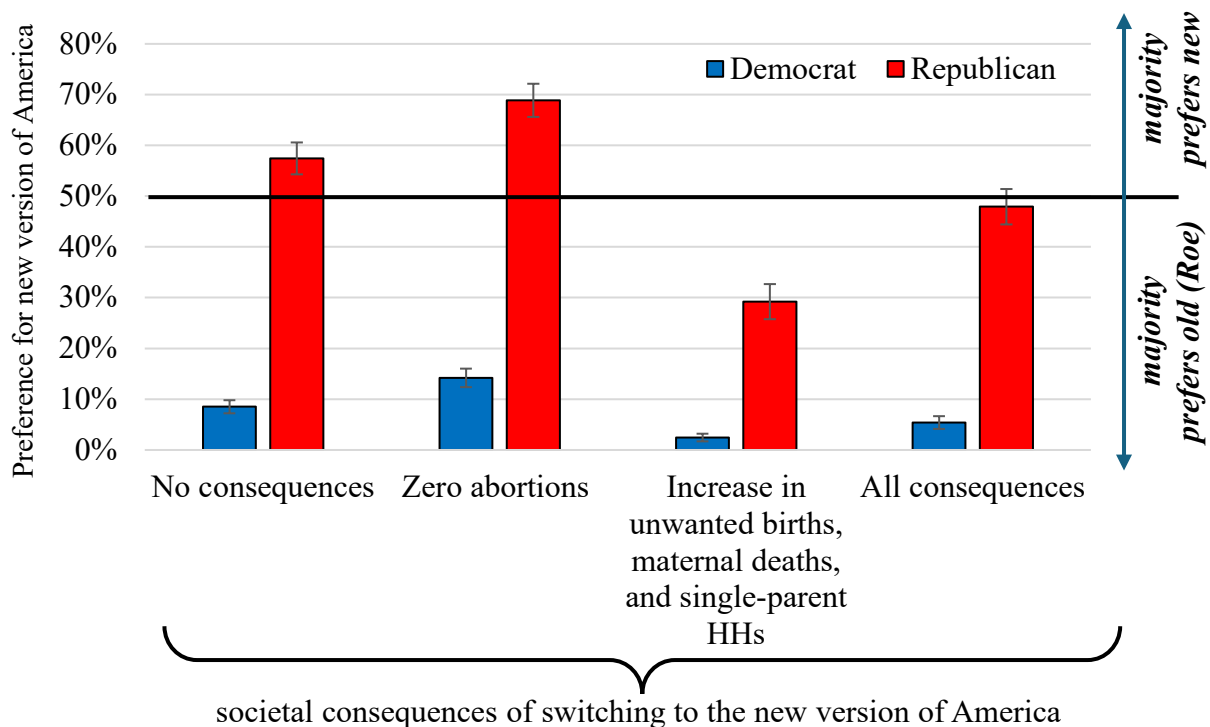
In summary, the impact of consequences on the support for a ban is especially pronounced among Republicans whose support ranges from 69% for a ban that eliminates abortions to a low of 29% for a ban that only has adverse consequences. Democrats, on the other hand, remain strongly against the ban regardless of the consequences it might have, with support remaining below 15% regardless of the consequences it is paired with.

Figure 4: Impact of potential consequences alone on country version preference

societal consequences of switching to the new version of America
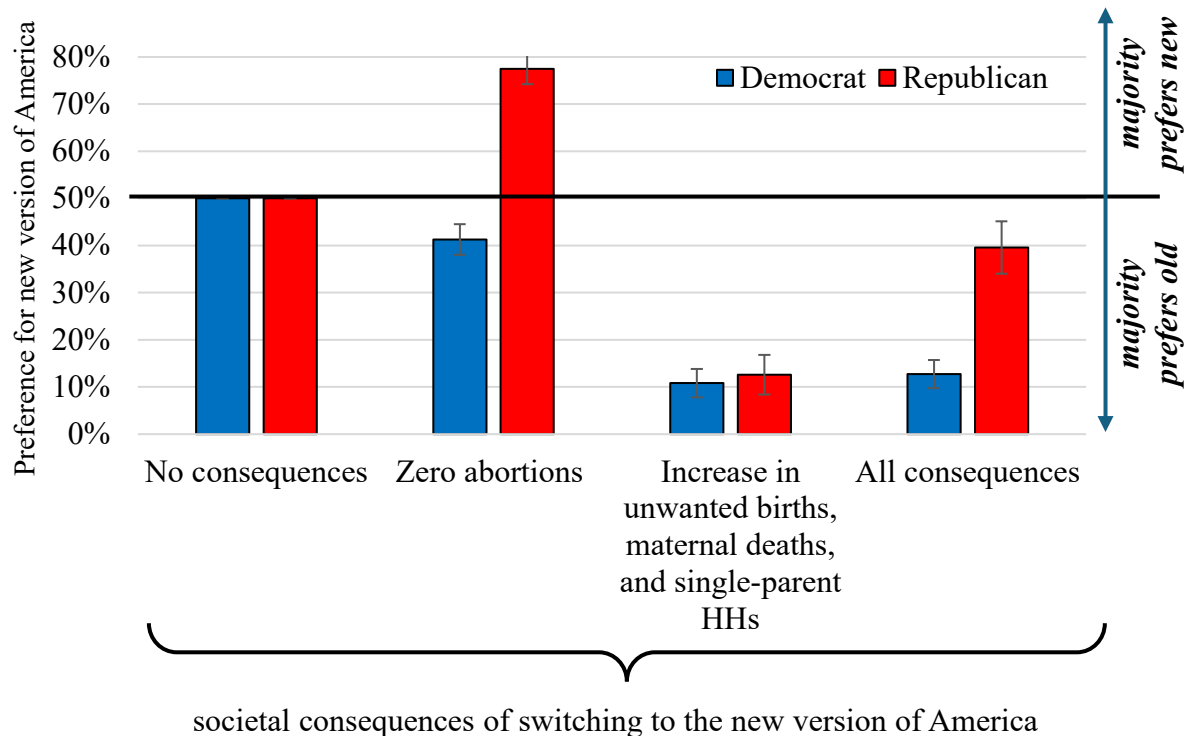
What if we set the question of a national ban aside, and ask a more basic question: do American partisans at least agree on the societal outcomes they would like to achieve? We examine this question in Figure 4 by comparing two versions of America, both of which do not have an abortion ban. One version has the current levels of societal outcomes. The other (new) version differs in terms of the societal outcomes in the same way that the above four scenarios do. The 50-50 result in the first column is thus mechanical: the two versions of America are identical to each other. In the second column of Figure 4, we see that Republicans strongly support an outcome where abortions are eliminated, while Democrats actually weakly prefer the number of abortions that occurred before the *Dobbs* decision. Thus, Democrats do not seem to agree with Bill Clinton's suggestion that abortions should be "rare." The partisan divide therefore extends beyond a disagreement about bans – partisans also disagree whether abortions should be somehow eliminated. However, when we look at the preferences regarding adverse consequences, we find remarkable

agreement: Democrats and Republicans are equally unhappy with these negative outcomes, both directionally but also in magnitude (only 11% of Democrats and 13% of Republicans would prefer to live in a version of America with those adverse outcomes over the status quo). Thus, perceptions in liberal popular press (e.g., Pollitt 2023 or Cooper 2023) that Republicans care less about these issues is incorrect. Instead, to the extent people support bans that have these adverse effects, it is because the other benefits outweigh these costs to these individuals. In terms of marketing, these results also show that to the extent that that the laws that are passed have negative consequences on women, messaging about these problems could be an effective way to build a bipartisan support against a ban.

Additional policy-relevant research questions can be answered using the simulation approach employed in this section. For example, focusing on the pure policy of an abortion ban, we can simulate the impact of adding exceptions for rape, incest and a mother's health to a ban. Table 2 shows that for every partisan subgroup and every type of geographical extent of the ban, the ban enjoys stronger support when it includes exceptions. This resonates with both today's popular press and with existing work (e.g. Thomadsen, Zeithammer and Yao 2023).

Table 2: Effect of Adding Exceptions to a Ban, by geographical extent and subgroup

group:	Ban type	National Complete	National Exceptions	Own state Complete	Own state Exceptions	Other state Complete	Other state Exceptions
Overall	Mean	19.9%	26.2%	24.4%	32.6%	27.6%	35.5%
	Std. Error	0.6%	0.6%	0.8%	0.9%	1.0%	1.3%
	Difference	6.3%		8.1%		7.9%	
	Ban type	0.8%		1.2%		1.6%	
Democrat	Mean	5.9%	8.5%	8.7%	16.2%	13.4%	22.3%
	Std. Error	0.6%	0.7%	0.9%	1.2%	1.2%	2.2%
	Difference	2.6%		7.5%		8.9%	
	Std. Error	0.9%		1.5%		2.5%	
Republican	Mean	46.5%	57.4%	52.5%	59.4%	50.7%	59.0%
	Std. Error	1.8%	1.6%	2.2%	2.4%	2.5%	2.6%
	Difference	11.0%		6.9%		8.2%	
	Ban type	2.4%		3.2%		3.6%	
Other	Mean	16.8%	24.1%	22.3%	32.4%	27.6%	33.9%
	Std. Error	1.1%		1.4%	1.7%	1.8%	2.6%
	Difference	7.3%		10.0%		6.2%	
	Std. Error	1.5%		2.2%		3.1%	

Note to Table: The "mean" rows list the estimated share of preference for the new version of America with a ban, pitted against pre-Dobbs America. The **bold** differences are the increases in preferences for the new version of America with a ban due to adding exceptions.

4. Discussion

We adapt conjoint analysis to measure preferences for public policies as well as some potential societal consequences of these policies. This allows us to examine how beliefs about a policy's outcomes affect the support one would get for the underlying policies. That, in turn, has implications for the optimal messaging that advocates should use on both sides. Our approach also allows us to understand the extent to which the partisan divides over abortion we see are based on preferences for different societal outcomes, or whether the disagreement is tied to the policy itself.

When it comes to abortion, Americans are divided along partisan lines in their preferences for the country they would like to live in: Republicans care more about the number of abortions actually happening (preferring a lower number), while Democrats care more about the policy itself (preferring to go back to the pre-*Dobbs* version of America). The divide thus spans both policy and outcome preferences. However, there are also two main areas of agreement: both partisans and independents agree on disliking bans without exceptions for rape, incest and health of the mother, and they also agree on the extent to which they dislike the potential adverse consequences of a national abortion ban (increase the number of maternal deaths, unwanted births, and children growing up in single-parent households).

The multi-attribute nature of the preferences we measure means that the overall support for a national abortion ban depends on which consequences people believe the ban will have. We find that the impact of considered consequences on the support for a national ban can be large: the percentage of Americans who prefer to live in a version of the country with a national abortion ban can either increase by a third or decrease by half depending on which consequences of the ban people consider likely. Of the two partisan groups, we find that Republicans can be moved by consequences more than Democrats: while over 85% of Democrats prefer to live in a country without a ban remains across all potential combinations of consequences we study, the Republicans actually flip their preference from 69% supporting a ban when the ban eliminates abortions but has no adverse consequences to 29% when the ban has only adverse consequences.

The implications for Republican messaging to gain support for a ban is clear: they should highlight that the ban will drastically reduce the number of abortions. However, such messaging is very unlikely to persuade Democrats to start supporting a ban. On the other end of the political spectrum, Democrats building opposition to a ban may find that highlighting the negative consequences of the ban is a very effective strategy, which may actually bring Republicans to their side. Highlighting these negative consequences thus has the largest potential of uniting the country for politicians, as long as the politicians do not mind uniting against a national ban.

The potential path to a national consensus for a ban seems narrow: in addition to adding consequences as describe above, we also explore the support for a national ban with exceptions that would

only have a 50% reduction in the number of abortions as a direct consequence, but also include a set of policies enacted by the government in order to ease the burden of raising children. Specifically, we consider pairing a ban with a 3-month paid maternity leave, a 50% cost of child-care subsidy for everyone, and a universal public pre-school starting at age 3, all provided without any increase in income taxes. The simulations indicate that even such a generous policy does not lead to a majority of support for the ban (we estimate 48% of Americans would prefer the ban under those conditions), and it also does not heal the political divide (with only 29% of Democrats would support the ban under those conditions compared to 76% of Republicans).

This paper pits a national abortion ban against the pre-*Dobbs* situation of no ban in any state, neither of which is the current status quo, which is characterized by a mix of states with and without bans. One possible extension of the results would be to investigate the potential of healing the partisan divide inherent in this status quo. The preferences we estimate suggest that members of both parties would support a policy without any bans in any state (something Democrats like) paired with a reduction in the number of abortions that actually take place (something Republicans like). If such a reduction could be achieved by means other than banning the procedure, Clinton's famous claim that abortions should be "safe, legal, and rare" may reflect population preferences, after all, even with the heterogeneity between the people who want abortions to be safe and legal and the people who want them to be rare.

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Appendix:

Full Details: Complete Dataset and Complete Survey Stimuli posted at Open Science Foundation: https://osf.io/vdh6c/?view_only=f81abc106f194f0fb5291cb29e31ed15.

Technical details and definitions of importance weights and simulated shares

We used Sawtooth Software to estimate the standard Hierarchical-Bayes Multinomial Logit (HB-MNL) model, with four covariates: age, gender, political party, and education.[17] Each round of each survey was estimated separately and produced estimates of individual-level partworth utilities. All qualified participants in each round[18] were included in the estimation, but only preferences of individuals who did not qualify in an earlier round used in the analysis.

The starting point of our analysis are the individual-level partworth utility draws $u_{i,a,k,n}$ for individual i, attribute a, attribute-level k, and MCMC draw n. The importance weight $IW_{i,a,n}$ on attribute a are then defined as:

$$IW_{i,a,n} = \frac{\max_k(u_{i,a,k,n}) - \min_k(u_{i,a,k,n})}{\sum_{a\prime=1}^A \left[\max_k(u_{i,a\prime,k,n}) - \min_k(u_{i,a\prime,k,n})\right]}. \tag{A1}$$

We also calculate the simulated share of Americans who would choose a particular version of the country, e.g. the percentage who would choose a national abortion ban over the system that existed under Roe vs. Wade when abortion was protected. Let us denote the two versions of America we pit against each other as profiles A and B. Profile A specifies a specific level for each of the attributes, and $A(a)$ gives the specific level that attribute a has under profile A. Then, the probability that participant i chooses world A from $\{A,B\}$ based on the MCMC draw n is dictated by the logit model assumed in the estimation as follows:

$$Pr_{i,A,n}|\{A,B\} = \frac{exp(\sum_a u_{i,a,A(a),n})}{exp(\sum_a u_{i,a,A(a),n}) + exp(\sum_a u_{i,a,B(a),n})}. \tag{A2}$$

The individual-level measures of interest described in the previous section can be averaged to provide a group or population-level summary.[19] The mean of that posterior distribution over the MCMC draws is the posterior average of the focal statistic, and the standard deviation over the MCMC draws is the Bayesian estimate of the standard error of the statistic. Regardless of grouping, we employ a weighting scheme designed to match the population votes in the 2020 presidential election, as noted in footnote 7.

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[17] The covariates were coded as follows: age in decades, and dummy variables for female, having a college education, Democrat, and Independent. Other than the mechanical negative correlation between being a Democrat or Independent, the correlations between these variables do not exceed 0.12 in absolute value. Note that the preferences are standardized in a manner that undoes the effect of including one category (e.g. females) vs. the opposite of it (e.g., non-females).

[18] 1013 in the first wave, 1210 in the second wave, and 941 in the last wave.

[19] Hein et al (2022) shows that this aggregation method is both theoretically sound and empirically optimal in predicting holdout shares of preference.

Figure S1: Sample conjoint task on abortion issues (partial profile design)

Imagine that you had to choose which version of America to live in. **If these were your only options** (and they were identical to each other in every other respect), which would you choose?

Your Annual Income Taxes	No Change	Increase by $2,000
Percentage of single-parent households	35%	15%
Abortion system	Your state has ban WITH exceptions, some others have no ban	Your state has ban WITHOUT exceptions, some others have no ban
Childcare subsidy eligibility	Only parents earning under $50K	Only parents in poverty
Annual number maternal deaths	1600	2400
	Select	Select

Remember that the two versions of America shown above do not differ from each other except for the aspects shown.

Table S1: Attributes and levels: detailed wording

Please see the full survey on Open Science Foundation[20] for the detailed wording of how the attributes were introduced and described to participants before the conjoint tasks commenced. The list below shows the (often abbreviated for clarity) wording of the attributes and levels within the conjoint tasks themselves.

Government control
- Democrat President & Congress
- Dem. President, Rep. Congress
- Republican President & Congress
- Rep. President, Dem. Congress

Your income taxes
- Increase by $4,000
- Increase by $2,000
- No Change
- Decrease by $2,000
- Decrease by $4,000

Abortion system
- Complete national ban WITHOUT exceptions
- Complete national ban WITH exceptions
- Your state has ban WITH exceptions, some others have no ban
- Your state has ban WITHOUT exceptions, some others have no ban
- Other states have a ban WITH exceptions, your state has no ban
- Other states have a ban WITHOUT exceptions, your state has no ban
- No bans in any state

Maternity leave
- None
- 3 months unpaid
- 3 month paid
- 1 year unpaid
- 1 year paid

Childcare subsidy eligibility
- Only parents in poverty
- Only parents earning under $50K
- All parents
- No subsidies

Age of public school start
- 3 (universal early preschool)
- 4 (universal preschool)
- 5 (kindergarten age)

Annual number of abortions None
- 450,000
- 900,000 (current level)
- 1.8 million

Number of unwanted births per year
- None
- 1 million

- 2 million
- 3 million

Annual number of maternal deaths
- 400
- 800 (current level)
- 1600
- 2400

Percentage of single-parent households
- 15%
- 25% (current level)
- 35%

Table S2: Demographics of the participant sample

Number of participants	1921
Gender: Male	51.40%
Gender: Female	47.10%
Gender: Other	1.50%
Education: HS or less	10.90%
Education: Some college	32.80%
Education:college	39.70%
Education:masters+	16.60%
Age:18 to 25	6.50%
Age: 25 to 45	60.30%
Age: 45 to 65	27.70%
Age: 65 and over	5.50%
Ethnicity: Native	2.20%
Ethnicity: Asian	7.70%
Ethnicity: African	9.60%
Ethnicity: Hispanic	7.80%
Ethnicity: Pacific	0.50%
Ethnicity: White	78.80%
Ethnicity: Mixed	3.30%
Ethnicity: Other	0.60%
2020 election: Biden	56.80%
2020 election: Trump	22.60%
2020 election: Other	4.30%
2020 election: did not vote	16.30%
Democrat	50.40%
Republican	21.70%
Other party	3.40%
Independent	24.40%

Table S3: Linear regression of individual importance weights on demographics

Dependent variable:	Importance Weight of Abortion Policy				Importance Weight of Number of Abortions			
Explanatory variable:	Estimate	SE	t-Stat	p	Estimate	SE	t-Stat	p
Intercept	21.83	0.57	38.24	0.0000	8.82	0.33	26.61	0.0000
non white	-2.09	0.32	-6.54	0.0000	0.43	0.19	2.30	0.0215
female	0.97	0.25	3.79	0.0002	-0.32	0.15	-2.16	0.0311
college educated	-1.80	0.26	-6.90	0.0000	0.02	0.15	0.14	0.8916
age (decades)	-0.14	0.11	-1.28	0.1990	0.24	0.06	3.91	0.0001
democrat (vs. indep.)	2.88	0.31	9.45	0.0000	-1.81	0.18	-10.22	0.0000
republican (vs. indep.)	-4.51	0.37	-12.36	0.0000	3.14	0.21	14.80	0.0000
midterm voter	0.45	0.26	1.73	0.0834	0.10	0.15	0.66	0.5085
from state w/ a ban	-0.53	0.26	-2.04	0.0412	0.35	0.15	2.31	0.0209
log (media intensity)	0.06	0.18	0.35	0.7228	-0.02	0.10	-0.23	0.8218
wave 2 (after election)	2.14	0.32	6.77	0.0000	0.10	0.18	0.53	0.5982
wave 3 (year later)	-0.43	0.32	-1.33	0.1825	-0.37	0.19	-1.99	0.0464
R squared	0.276				0.283			
Num. of observations	1921				1921			