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Family planning policy in the United States: the converging politics of abortion and contraception

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Abstract

Objectives: Following decades of mainstream bipartisan support, contraception has reemerged as a controversial political issue in the United States. At the same time, opposition to abortion has intensified. State legislatures across the country have enacted highly visible policies limiting access to family planning. Perhaps the most striking example occurred in 2011 in Texas, when legislators instituted unprecedented requirements on abortion providers and cut public funding for contraception by two thirds. Yet, despite popular interpretations of this phenomenon as a simple byproduct of increasing partisan divisions, little is understood about the factors underlying such policy shifts.
Study design: We fit Bayesian ideal-point models to analyze correlation patterns in record-vote data in the Texas House of Representatives in the 2003 and 2011 Legislatures. Both sessions had large Republican majorities and saw the passage of restrictive abortion bills, but they differed markedly with respect to public funding for contraception.
Results: We demonstrate that variation in voting on family-planning issues cannot be fully attributed to partisanship in either session. However, the politics of abortion and contraception have converged over time, and — at least for Democrats — the correlation between constituency characteristics and voting behavior on family-planning legislation is markedly higher in 2011 than in 2003. These shifts have been partly driven by legislators from high-poverty, majority Latino districts near the US–Mexico border.
Conclusions: Recent dramatic shifts in family-planning policy go beyond simple partisan divisions. As the politics of abortion and contraception have converged, policies that are increasingly hostile to reproductive health and that disproportionately affect low-income minority women have emerged.
Implications: Recent shifts in family-planning policy restrict women's access to contraception and abortion, yet little research has examined why such shifts are occurring. This paper analyzes factors underlying voting behavior on restrictive policies in Texas. Identification of these factors helps us to better understand the current political climate surrounding our field.

Keywords: Family planning policy; Contraception; Abortion; Legislation

1. Introduction

Family-planning policy in the United States has recently taken a dramatic change in direction. Over the last decade, the pace of legislation designed to restrict access to abortion services has accelerated [1]. At the same time, public funding for contraception has been singled out as the specific target of ideological opposition [2] and has become newly entangled in the abortion debate. Although abortion has long been controversial, this shift in attitudes toward contraception is both surprising and recent. It marks a striking change from the 1950s and 1960s, during which the family-planning movement generated strong bipartisan support for widespread voluntary access to contraception [3]. This era culminated in 1970 with a Republican president, Richard Nixon, signing into law Title X, the only federal block grant dedicated exclusively to providing publicly funded contraceptive services. Yet, now the entire spectrum of family-planning policies sits at the heart of deep political divisions. At the national level, the US Congress has considered proposals to eliminate Title X and to defund Planned Parenthood, the largest provider of reproductive health and family-planning services in America [4,5]. The Affordable Care Act's requirement for coverage of contraceptives by employer-provided health plans met strong opposition and legal challenges, as did attempts to allow Food and Drug

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Administration (FDA) approval for unrestricted access to over-the-counter emergency contraception [6].

But the bitterest debates, along with most actual policy changes, have taken place within state legislatures. Between 2010 and 2012, public funding for family planning faced deep line-item cuts across a diverse group of states: Florida, Georgia, Maine, Minnesota, Montana, New Jersey, Texas, Washington, and Wisconsin. In addition, seven other states disallowed providers affiliated with abortion services from receiving state funds for contraception [7]. By the end of 2011, 92 provisions restricting access to abortion had been enacted across 24 states [1].

Perhaps, the biggest changes of all were enacted during the 2011 legislative session in Texas, in which a small group of Democrats joined with the large Republican majority to pass a series of major bills affecting family-planning services in Texas. First, clinics affiliated with abortion providers were excluded from the Women's Health Program, a Medicaid waiver that is 90% federally funded and provides low-income women with contraception and other reproductive health services. As a result, all federal funding for the program was lost. Second, House Bill 15 instituted a mandatory sonogram and 24-h waiting period for women seeking an abortion. The consequences of this legislation have already been felt, with a substantial number of clinics closing, and others reducing the services they provide [8]. Finally, the state's biennial family-planning budget was cut from US$111 million to US$37.9 million, with the remaining funds allocated in a tiered system giving low priority to specialized family-planning clinics [9].

Previous studies have highlighted partisanship as an important explanatory factor in US congressional votes on abortion issues [10,11]. But the politics of abortion within state legislatures have not been studied in detail and also the politics of public funding for contraception. Our paper addresses this gap by undertaking a careful analysis of the voting patterns on family-planning legislation in the 2011 and 2003 Texas Legislatures.

There are several reasons for using the 2003 Texas Legislature as a counterpoint to the events of 2011. The 2003 session also had a large Republican majority and also saw extreme partisan divisions. It also had the same legislative district map, which was redrawn just before 2003 and again after 2011. Finally, it also witnessed bitter debates over two major bills regulating abortion: HB 15, the "Women's Right to Know Act," and SB 319, the "fetus as an individual" bill. Yet, the 2003 Legislature also voted to increase public funding for access to contraception. Furthermore, the individual votes on contraception in 2003 — which programs to fund and where to divert the money from — exhibited notably different patterns from the votes on abortion. These last two facts in particular suggest that the events of 2011 marked a break from past consensus over public funding for contraception, potentially auguring a "new normal" in which the politics and abortion and contraception, once separate, are now linked.

2. Data and methods

To understand these shifting patterns, we fit Bayesian ideal-point models to voting data from the 2003 and 2011 Texas Legislatures. Ideal-point models are widely used in political science to study voting behavior. These idealized behavioral models represent all legislators and bills in a given year in terms of their spatial locations in an underlying Euclidean space, called the *political space*, which can be estimated from voting data. Ideal-point models allow us to formulate questions about the shifting politics of abortion and contraception in a quantitatively rigorous way, by providing estimates for the relative locations of abortion bills and contraception-funding bills within the 2003 and 2011 political spaces.

2.1. Voting data

Our data set comprised all roll-call votes taken by the 150 members of the Texas House of Representatives in the 2003 and 2011 legislative sessions, including all special sessions (1013 votes in 2003, 1206 votes in 2011). Within each year, we tagged all bills related to family planning, as described in the Technical Supplement. These family-planning votes fell into two broad categories:

1. Votes about the regulation of abortion. In 2003, these included all votes on the Women's Right to Know Act (HB 15) and the "fetus as an individual" law (SB 319). In 2011, these included all votes on the sonogram bill (HB 15).

2. Votes about funding and programs that provide access to contraception (e.g., through Medicaid, Title X and the Women's Health Program). In 2003, these included 10 votes on the general appropriations bills (HB 1) and 5 other votes on HB 2292 concerning state funding for or regulation of contraceptive services. In 2011, these included 17 votes on the general appropriations bill (HB 1) and 9 other votes (on HB 13, SB 1, SB 7 and SB 23) concerning state funding for or regulation of contraceptive services.

In addition, we also collected background information on the legislators and their constituencies. These included whether the legislator is male and whether he or she is Catholic, along with six constituency-level variables: the percentage of constituents who are (a) non-Hispanic White, (b) foreign born, (c) single parents, (d) live in rural areas, (e) hold at least a bachelor's degree, and (f) live below the federal poverty line. The only publicly available demographic data at the level of Texas house districts is from the 2007 to 2011 American Community Survey, which we use as a proxy for both the 2003 and 2011 constituency-level characteristics.

2.2. Bayesian ideal-point models

We use Bayesian ideal-point models [12,13,14] to examine these roll-call votes, with the goal of understanding the relationship between votes on abortion and votes on contraception within each session. These models are

frequently used by quantitative political scientists to describe patterns of correlation in votes cast by lawmakers. The key assumption of an ideal-point model is that both policies and legislators can be represented geometrically, as points in a latent Euclidean space (the "political space"). As Clinton et al. [15] explain, this hypothesis can be motivated by a stylized behavioral model: "Each legislator has a most preferred policy or *ideal point* in this space and his or her utility for a policy declines with the distance of the policy from his or her ideal point...." Political scientists have argued that roll-call votes typically exhibit enough regularity that such models can, despite their simplicity, still capture much of the interesting political structure of a legislative body [16].

An important choice in constructing an ideal-point model is the number of axes (i.e., the dimension) d that define the political space. In most analyses, this is chosen to be small, with $d=1$ or $d=2$ being the most common. In particular, Poole and Rosenthal argue convincingly that two latent dimensions are sufficient to explain roll-call votes in the US House and Senate over more than 200 years of American history [16].

Following the example of Poole and Rosenthal, we fit two-dimensional ideal-point models to the 2003 and 2011 Texas Legislatures. As detailed below, we use the flexibility of the Bayesian framework to ensure that the two axes of the political space have simple interpretations: the first axis captures major differences between Republicans and Democrats, while the second axis describes a legislator's position on family-planning policy.

2.3. Model-fitting details

We adopt the approach of Jackman [14], who frames ideal-point analysis in terms of a factor-analytic probit model. Specifically, let $y_{ij}=1$ if legislator i votes in favor of bill j, and $y_{ij}=0$ otherwise. Our model assumes that y_{ij} is a Bernoulli random variable such that

$$\Pr(y_{ij}=1)=\Phi(\alpha_j+\beta_{j1}f_{i1}+\beta_{j2}f_{i2}) \quad (1)$$

Here Φ is the inverse-link function for the probit regression model, β_{j1} and β_{j2} are the factor loadings for bill j, α_j reflects the overall fraction of "yea" votes for bill j, and f_{i1} and f_{i2} are the factor scores for legislator i (which describe the location of the ideal point for legislator i along the two axes of the political space.)

Similar factor models are widely used in psychometrics, where they are called *multidimensional item-response theory* (IRT) models. Readers familiar with IRT models will recognize α_j as an "item-difficulty" parameter (where each vote is an item), β_{j1} and β_{j2} as vote j's "discrimination" parameters and f_{i1} and f_{i2} as lawmaker i's "ability" parameters on the two latent dimensions (e.g., van der Linden and Hambleden, 1997 [17]).

Estimating this ideal-point model poses two obstacles, one computational and the other statistical. First, the model has a large number of parameters representing locations in political space: one point for each bill (β_{j1},β_{j2}) and one for each lawmaker (f_{i1},f_{i2}). No simple formulas exist for the optimal parameter values, and fitting such highly structured models requires careful attention to algorithm design. Second, classical statistical theory offers no straightforward way to quantify uncertainty about the parameter estimates. In particular, naïve ways of computing standard errors are invalid [15,16]. Adopting a Bayesian approach elegantly addresses both problems. Using a technique called Markov-chain Monte Carlo to sample from the posterior distribution implied by Eq. (1), we avoid intractable computational difficulties and can compute valid nonasymptotic credible intervals for all estimated parameters.

The Bayesian approach offers another advantage related to model interpretation. Interpreting the results of a factor model can be difficult, as the ideal points f_{ik} and the factor loadings β_{jk} are latent variables and must be restricted in some way for the model to be statistically identifiable (e.g., Jackman, 2001 [14]). These challenges are handled with relative ease under the Bayesian paradigm, by using prior distributions that provide simple interpretations for model parameters.

We make two choices in this regard. First, to ensure that the first factor defines the Republican–Democrat axis of the political space, we used a prior distribution that put higher probability on f_{i1} being positive for a Republican legislator and negative for a Democratic legislator.[1] This still allows a legislator's first factor to be of a sign opposite to most members of his or her party, should the data warrant it. But this assumption gently expresses the expectation that most legislators will vote with their party most of the time, and it leads to easily interpretable results.

Second, to enforce the interpretation that the second factor corresponds to family-planning issues alone, we impose the structural requirement that β_{j2} is zero for all bills, excepting those specifically tagged as relevant to family planning. This approach is referred to as sparse factor-probit analysis [18]. Together with other features of the prior distribution described in the Technical Supplement, this constraint is sufficient to identify each legislator's position on the second axis of the political space.

We emphasize an important fact about our model: a lawmaker's votes on family-planning issues are predicted by both factors, not just the family-planning factor alone. Therefore, the correct interpretation of the family-planning factor f_{i2} is not "How does this legislator vote on family-planning issues?" Rather, it is "How does this legislator vote on family-planning issues, relative to his or her location f_{i1} on the Republican–Democrat axis?" In other words, a legislator's second factor score is explicitly adjusted for his or her ideological position on other legislative issues, including issues of health policy or social welfare that may be strongly correlated with support for access to family-

[1] Specifically, these terms were assigned Gaussian priors with variance 1, and means of −1 and +1 for Democrats and Republicans, respectively.

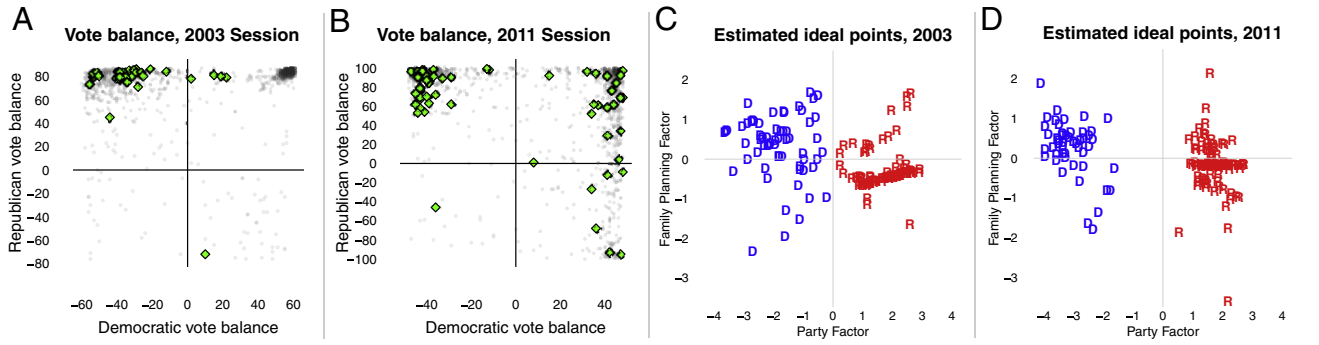


Fig. 1. The political spaces in the 2003 and 2011 sessions. Panels A and B show the vote balance (number of yeas minus number of nays within each party) for all votes in the 2003 and 2011 sessions. The family-planning bills are large diamonds; all other bills are small dots. Panels C and D show the estimated ideal points of all legislators for each session. Democrats are labeled as D, Republicans as R.

planning services. The second factor therefore assesses the degree to which a lawmaker's position on family-planning issues is anomalous, compared to his or her demonstrated views on other policies.

We summarize the interpretation of our model as follows:

- Positive values of f_{i1} indicate Republican legislators, and positive values of β_{j1} indicate bills favored by Republicans. Negative values indicate Democratic legislators and bills.
- Positive values of β_{j2} indicate bills that promote access to family planning, and positive values of f_{i2} indicate legislators who vote for these bills, adjusting for their locations on the party axis. Negative values indicate the opposite.
- Bills with $\beta_{j2} \approx 0$ exhibit voting patterns that are unrelated to the family-planning axis of the political space. Legislators for whom $f_{i2} \approx 0$ vote on family-planning issues in a way that is not systematically different from their votes on other partisan issues.

We fit separate ideal-point models for 2003 and 2011 using the Markov Chain Monte Carlo (MCMC) algorithm available in the R package "pscl" (Jackman, 2011) and detailed in the technical supplement. There do exist methods that would have allowed us to estimate both years together using a single dynamic ideal-point model (e.g., Martin and Quinn, 2002 [19]). However, these models require the assumption that the underlying political space is time invariant so that a legislator's changing location in that space can be identified. Our results show that this assumption is clearly false, specifically because of the changing correlation structure between votes on abortion and contraception. This contraindicates the dynamic model and suggests that we should estimate each year's political space separately.

The technical supplement contains further details of the model and fitting algorithm.

2.4. Ideal points versus legislator and constituency characteristics

After fitting the ideal-point models described above, we examined the relationship between location on the family-planning axis and legislator/constituency characteristics. To do so, we created maps showing the districts represented by legislators with the most extreme family-planning scores. We also fit regression models for family-planning factor score (f_{i2}) versus the eight covariates mentioned previously,[2] using the posterior-mean factor score as the dependent variable in the regression. These models were fit separately by year and by party, and two versions of each model were fit: a model with all eight covariates fit by ordinary least squares and a reduced model with variables chosen to optimize Akaike's Information Criterion, thereby minimizing the possibility of over-fitting. The goal of these regressions was not to investigate causal relationships but simply to quantify the overall predictability of legislators' family-planning factor scores.

3. Results

3.1. The role of partisanship in votes relating to family-planning policy

Fig. 1 plots the Republican vote versus the Democratic vote balance for all roll-call record votes in the 2003 (Panel A) and 2011 (Panel B) sessions. (Each party's vote balance is the number of legislators voting yea minus the number voting nay.) Bills and amendments relevant to family planning accounted for 35 of 1013 votes 2003 and 63 of 1206 votes in 2011. These family-planning bills are shown as diamonds in Panels A and B versus smaller gray dots for

[2] Whether the legislator is male and whether he or she is Catholic, and the percentage of constituents who are (1) non-Hispanic white, (2) foreign-born, (3) single parents, (4) live in rural areas, (5) hold at least a bachelor's degree, and (6) live below the federal poverty line.

other bills. Panels C and D of Fig. 1 plot the estimated ideal points (factor scores) for each legislator in both the 2003 and 2011 political spaces. Each Republican is shown as an R and each Democrat as a D.

Fig. 1 shows strong patterns of partisan voting in both sessions. Many bills concentrate at the corners of Panels A/B, particularly the upper-left corner (reflecting large Republican majorities for and large Democratic majorities against). Panels C/D also show a clear separation in both years of Republicans and Democrats along the partisanship axis of the political space, with more pronounced separation in 2011.

In neither year are legislators' family-planning factor scores strongly correlated with their partisanship factor scores. For example, in 2011, out of the 20 legislators with the largest negative scores, 7 are Democrats; while out of the 20 with the largest positive scores, 8 are Republicans. The 2011 Republican legislator with the highest score, Sarah Davis, became well known in Texas for her attempts to broker common-ground legislation in support of funding for contraception. The fact that many legislators have large nonzero family-planning factor scores shows that there are considerable differences among legislators in voting on family-planning legislation, even after accounting for legislators' positions on other issues.

3.2. The changing politics of contraception

Our results show a clear change in the politics of family planning between 2003 and 2011. In 2003, votes on contraception looked very different from votes on abortion — that is, they occupied different regions of the political space. In 2011, however, votes on these two issues looked very similar to each other.

Fig. 2 demonstrates this result clearly. First, consider the left four panels (A1–D1). These ternary plots show the location of all 2003 and 2011 family-planning votes in their respective political spaces, as well as the overall predictability of each vote. Each triangle depicts a Bayesian version[3] of R^2 for each factor on each vote, which we denote by $\rho_j^2 = (\rho_{j1}^2, \rho_{j2}^2)$ and define as:

$$\rho_{jk}^2 = \frac{\beta_{jk}^2}{\beta_{j1}^2 + \beta_{j2}^2 + 1}.$$

Intuitively, this measure quantifies that the fraction of variation in votes on bill j can be predicted by the party factor (ρ_{j1}^2) and family-planning factor (ρ_{j2}^2), as opposed to unexplained residual variation ($1 - \rho_{j1}^2 - \rho_{j2}^2$). Votes that fall at the top or left corners are "pure single factor" votes, meaning that most of their variation can be explained by either the party factor alone (left corner) or the family-planning factor alone (top corner). Votes in the right corner are dominated by unpredictable residual variation. Each axis is normalized to a 0%–100% scale.

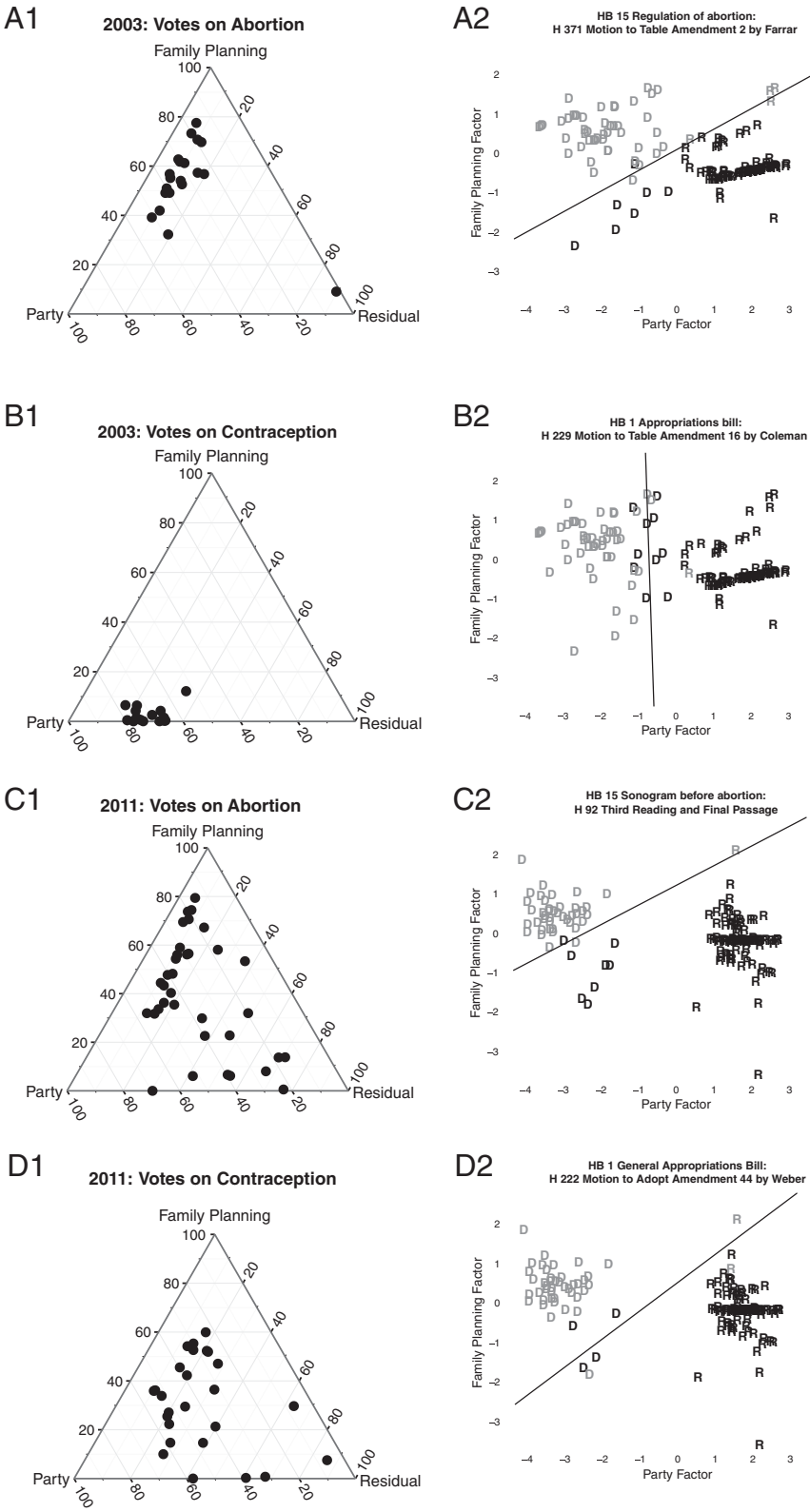
Panel A1 shows that 2003 abortion votes fall near the left edge of the triangle. These votes are highly predictable by the legislators' ideal points and exhibit roughly equal contributions from both the party and the family-planning factors (40–60% each). In contrast, the votes on contraception fall in the left corner. They are nearly pure partisan votes, essentially unrelated to the family-planning factor that so strongly predicts abortion votes. The two sets of bills fall in systematically different locations in political space.

But as Panels C1 and D1 of Fig. 2 show, the situation was very different by 2011. As in 2003, the 2011 abortion votes tend to fall along the left edge and, therefore, load highly on both factors (Panel C1). But so do the 2011 contraception votes (Panel D1): these tend to fall in a very similar location in the 2011 political space as the abortion votes. We conclude that the politics of abortion and contraception in Texas were distinct in 2003 but have converged by 2011.

Panels A2–D2 of Fig. 2 depict four specific votes that further illustrate this convergence. Each panel shows the "cutline" in political space for a single vote. Intuitively, a vote's cutline separates (or nearly separates) the ideal points of legislators who voted yes from those who voted no. A vertical cutline implies that a vote can be explained using the partisanship factor alone. A horizontal cutline implies

Fig. 2. The changing politics of public funding for contraception.The four left panels (A1–D1) show the locations in political space for all family-planning bills stratified by two criteria: 2003 versus 2011 sessions and votes on abortion versus votes on funding for contraception. Each panel is a ternary plot depicting a Bayesian version of R^2 for each vote in the corresponding stratum. Intuitively, the triangle provides a set of three axes: percent variation on a vote explained by the party factor, percent variation explained by the family-planning factors and unexplained residual variation. By construction, these three numbers must add up to 100. (See the Technical Supplement for details.) In 2003, abortion bills and contraception-funding bills fall in different locations in the political space (Panels A1 vs. B1). Abortion bills show large contributions from both factors, whereas contraception-funding bills are essentially pure-party votes, with nearly 0% variation explained by the family-planning factor. By 2011, however, the politics and abortion and contraception have converged, with both kinds of bills showing similar contributions from both factors (Panels C1 vs. D1). The right four panels (A2–D2) show individual bills that typify this convergence. In each panel, Republicans are labeled as R and Democrats as D; "yes" votes are shown in black and "no" votes in gray. Panel A2 shows a typical abortion bill from 2003. The voting cutline — that is, the line in political space that best separates the yes and no votes — is strongly diagonal, showing that the party factor alone cannot explain the pattern of votes. Panel B2, on the other hand, shows a typical 2003 bill on funding for contraception. Here, the cutline is nearly vertical. Therefore, this vote is a one-dimensional "party-only" issue that occupies a different location in political space than the abortion bill shown in A2. C2 and D2 show typical 2011 bills on abortion and contraception, respectively. In contrast to the 2003 bills in A2 and B2, both cutlines are now strongly diagonal (and thus these bills are two-dimensional issues). Taken together, all eight panels show that abortion and contraception occupied similar locations in political space in 2011 but not in 2003.

[3] See the supplement for details of this interpretation.



that a vote can be explained by the family-planning factor alone.[4]

[4] The Technical Supplement explains how these cut lines are calculated.

Panel A2 shows a vote in 2003 to table an amendment that would have weakened stringent provisions of the Women's Right to Know Act. The cutline is strongly diagonal: the model needs both the partisanship and the family-planning

factor scores to separate the yes votes (rendered as black R's and D's) from the no votes (gray R's and D's). This result contrasts sharply with Panel B2, which shows a 2003 vote that would have increased public funding for contraception. In this case, the cutline is predominantly vertical and the separation highly imperfect. The family-planning factor predicts this vote only weakly, if at all.

Now consider 2011 (Panels C2 and D2). Panel C2 shows the vote on the final passage of the sonogram bill, while Panel D2 shows a vote to table an amendment that would have increased public funding for contraception. The two panels look strikingly similar to one another: the cutline is strongly diagonal, and the yes/no votes are nearly separable. This further illustrates that, while contraception and abortion were once distinct political issues in Texas, this was no longer the case by 2011. Although only four votes are shown here, the pattern seen in the Panels A2–D2 holds for other votes in these categories as well. More examples are shown in the Technical Supplement.

3.3. Patterns among democrats voting to restrict access to family-planning services

We regressed the legislators' family-planning factor scores against constituency and legislator characteristics, separately by year and party. Tables 3–10 in the technical supplement show the coefficients for these regressions. There are some potentially interesting associations with specific legislator and district-level characteristics that were statistically significant. But it is difficult to make sense of these findings in light of the high degree of collinearity among the district-level predictors. We therefore do not attempt to interpret any individual coefficients from the regression models.

The most interesting finding is that the family-planning factor scores of Democrats are much more correlated with constituency characteristics in 2011 ($R^2 = 0.48$) than in 2003 ($R^2 = 0.13$). The same does not seem to be true for Republicans, whose factor scores are less predictable in 2011 than in 2003 ($R^2 = 0.05$ in 2011 vs. 0.17 in 2003).

The most interesting changes between 2003 and 2011 can be visualized geographically. Fig. 3 shows the districts of Democrats whose family-planning factor scores fell in the bottom quartile of their respective year (2003 left, 2011 right). These districts are geographically dispersed in 2003 but heavily concentrated in the high-poverty, majority-Latino areas of south Texas and El Paso in 2011. (This geographic concentration presumably accounts for the relatively high R^2 for the 2011 Democrats.) Seven of the eight Democrats with the lowest scores are male. Aaron Peña, the Republican who is closest to zero on the partisanship-factor scale, also has one of the most negative family-planning factor scores. He also represents a majority-Hispanic district in South Texas and was a Democrat until he switched parties prior to the 2011 session. Interestingly, the Democrats with the largest positive family-planning factor scores also tend to represent majority–minority constituencies but in the large cities of Houston, Dallas, and San Antonio, not along the US–Mexico border. Such a striking geographic pattern and such pronounced divisions within the Democratic party regarding public funding for contraception were not present as recently as 2003.

Of the 12 Democratic districts from 2011 shown in Fig. 3, there were 5 districts represented by the same legislator who served in 2003, and 7 were represented by new legislators. Thus, the converging politics of abortion and contraception may be driven partially by the election of new legislators and, partially, by the changing behavior of legislators who remained in office during the entire period in question. However, our analysis does not explicitly distinguish between changes in individual legislators' behavior and changes in legislature composition (i.e., turnover in which legislators hold office).

4. Discussion

We provide robust empirical evidence that the politics of abortion and contraception in Texas were once distinct but have converged over time: once we adjust for partisanship, a legislator's position on abortion policy strongly predicted his or her votes on funding for contraception in 2011 but not in 2003. Although it is tempting to explain the 2011 Texas Legislature's approach to family planning in terms of simple partisan politics, our results support a more complicated narrative in that partisanship alone provides an insufficient description of voting patterns.

These conclusions raise many further questions about how and why legislative voting behavior on family-planning issues has changed and how these changes might affect the future direction of family-planning policy and its impacts on public health. At least in Texas, the converging politics of abortion and contraception appear to have coincided with a shift in the voting patterns of male Democratic legislators representing districts near the US–Mexico border. While we cannot offer causal explanations, it is possible that these legislators feared challenges from more conservative candidates in subsequent elections or faced higher levels of pressure from religious lobbyists. The geographical patterns revealed by our analysis, however, raise interesting questions about how increasing numbers of Latino voters in Texas, and in the United States as a whole, will affect future family-planning policy. Hispanics are the largest and second-fastest growing minority group in the United States, [20] and while they have so far tended to vote Democratic, the salience of reproductive rights to their political leanings is yet to be discovered [21]. Data from the 2013 Pew Research Center Survey of Hispanic Adults suggest that 53% of Hispanics believe that abortion should be illegal, compared with 40% of the general public. In this survey, foreign-born Latinos are also more likely than US-born Latinos to say that abortion should be illegal (58% vs. 49%) [22]. However, data from the 2006 Latino National Survey indicate that regardless of nativity, most Hispanics strongly

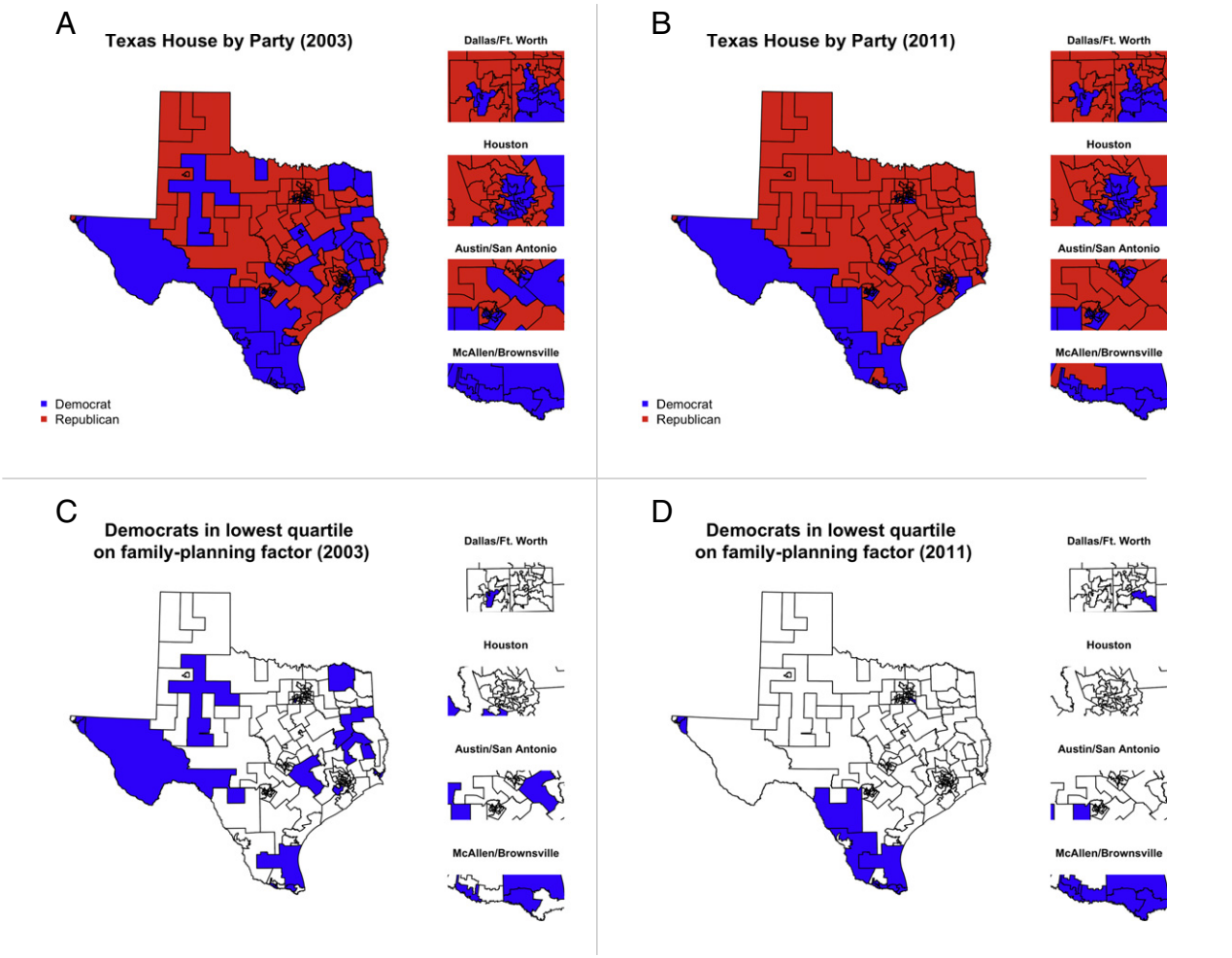


Fig. 3. The changing political map of Texas. Panels A and B show the changing political map of Texas, with Republicans' districts shaded red and Democrats' districts shaded blue. Panels C and D show the districts of Democratic legislators with family-planning factor scores in the lowest quartile of all Democrats within their year: 2003 on the left (C) and 2011 on the right (D). In 2003, the Democrats in the lowest family-planning quartile are scattered throughout rural and south Texas. During this period, the family-planning factor predicted only votes on abortion but not votes on contraception. Thus, Panel C essentially depicts a map of Democrats who (relative to other Democrats) favor restrictions on abortion but have no systematic differences from other Democrats on funding for contraception. In 2011, the rural Democrats not from south Texas have been voted out of office, and the Democrats in the lowest family-planning quartile are strikingly concentrated in south Texas. This coincides with the fundamental shift in the interpretation of the family-planning factor depicted in Fig. 2. Thus, Panel D shows a map of Democrats who (relative to other Democrats) favor restrictions both on abortion and on public funding for contraception.

agree that women should have easy access to contraception, with little difference between men and women, while 80% of Hispanic Catholics also support contraceptive access [23].

The converging politics of abortion and contraception in Texas are echoed in recent debates in other states and at the national level. State-level legislation limiting access to abortion and contraception continues to be introduced across the country. The FDA's decision to allow over-the-counter access to emergency contraception was met with strong opposition from antiabortion advocates. The Supreme Court's decision in *Burwell v. Hobby Lobby* sparked a national conversation about whether certain forms of contraception are abortifacients and about the implications of this alleged connection for public policy. Such a change in political climate has important implications for the future direction of reproductive health policy in the United States. The entanglement of contraception and abortion as policy issues has the potential to shift the dialog surrounding contraceptive provision programs from its current focus on improving health and well-being back to an historical debate surrounding the morality of who should have access to contraception and under what circumstances.

Family-planning policy in the United States shows few signs of deviating from its current trajectory. Our findings underscore the need to further investigate the underlying determinants of this phenomenon — not merely in legislatures but in courts, the media, and the minds of voters. Ideal-point modeling is especially promising in this regard, both for family-planning policy and for other social issues that have historically divided Democrats. Political scientists have also applied the techniques used in our paper to other data sources, such as judicial voting records and

political polls; and there is a robust line of work that attempts to estimate the ideology of citizens, legislators, judges, and even media outlets in a common political space [24]. Our results suggest that further work in this direction may be necessary to understand — and perhaps influence — the major shift in reproductive health policy that the country is now undergoing.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at http://dx.doi.org/10.1016/j.contraception.2016.01.007.

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