

# Measuring Court Preferences, 1950 - 2011: Agendas, Polarity and Heterogeneity

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## **Abstract**

Court scholars have a voracious appetite for Supreme Court preference measures. Martin and Quinn scores are widely used, but Ho and Quinn (2010) and others question whether they provide valid intertemporal measures. Given the widespread cardinal use of Martin and Quinn scores, this calls into question virtually an entire generation of quantitative research on the Court. This paper discusses the challenges of inter-temporal preference estimation and revises, updates and extends Bailey and Maltzman (2011) to present Supreme Court preference estimates that are more defensibly comparable across time and institutions.

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\*I appreciate comments from Albert Yoon. Any errors are mine.

Court scholars have a voracious appetite for Supreme Court preference measures, especially when analyzing the workhouse spatial models that predict median voter dominance, agenda setting power, institutional constraint and numerous other outcomes. Much of this demand has been filled by Martin and Quinn's (2002) preference measures. These preference scores, however, do not have a strong basis for being used in cross-time comparisons and in some periods imply implausible preference changes. Ho and Quinn (2010, 846) note the strong assumptions required to use Martin and Quinn scores in a cardinal sense and encourage scholars to use the scores in an ordinal sense.

Are empirical judicial scholars doomed to such an ordinal future? Can anything be done to generate preference estimates that are comparable over time? The main challenge is agenda change: if it is not accounted for, preference measures will not be able to distinguish agenda change from preference change. Other challenges include identifying the ideological polarity of votes, modeling the functional form of preference dynamics and dealing with possible multidimensionality of preferences (Lauderdale and Clark 2012; Fischman and Law 2009).

This paper presents new measures of Supreme Court preferences based on methods that specifically address inter-temporal comparability. The results differ markedly from Martin and Quinn regarding the ideological location of the Court in the 1970s and in the current era. The methods are distinct from Bailey (2007) and Bailey and Maltzman (2008, 2011) in that they use a more flexible approach to modeling preference change (following the logic of Martin and Quinn), cover a longer time period that includes Justices Kagen and Sotomayor and more explicitly address issues that have arisen in the literature such as the coding of ideological

polarity (Harvey and Woodruff (2011)). The paper also presents alternative specifications that control for some (but certainly not all) non-policy values that may influence judicial voting including factors that have not previously been assessed in related models.

## 1 Challenge of preference measurement

Ideology pervades theories of Supreme Court behavior, whether in spatial models (such as median voter theory, separation of power theory) or behavioral models that require statistical controls for judicial preferences. Many empirical scholars use Martin and Quinn (2002) scores when analyzing these models. These scores are the product of applying an item response theory model of preferences to data on individual justices on all cases from 1937 onward. The method requires no coding of cases as liberal or conservative and estimates a different preference for each justice for each term. The evolution of preferences for individual justices are smoothed over time by using the preference estimate from the previous term as a “prior” that shrinks the ideal point estimate for a justice in a given term toward the preference estimate for that justice in the previous term.

The ideal points have been used in models explaining opinion writing (Bonneau, Hammond, Maltzman and Wahlbeck 2007), the effect of case characteristics on ideological voting (Bartels 2009, 2011), oral arguments (Johnson, Wahlbeck and Spriggs 2006), appointments (Krehbiel 2007), congressional influence on the Court (Sala and Spriggs 2004), intercircuit conflict (Lindquist and Klein 2006), preference change (Epstein, Martin, Quinn and Segal 2007) and much more.

Martin and Quinn preference estimates are not without problems, however. The most

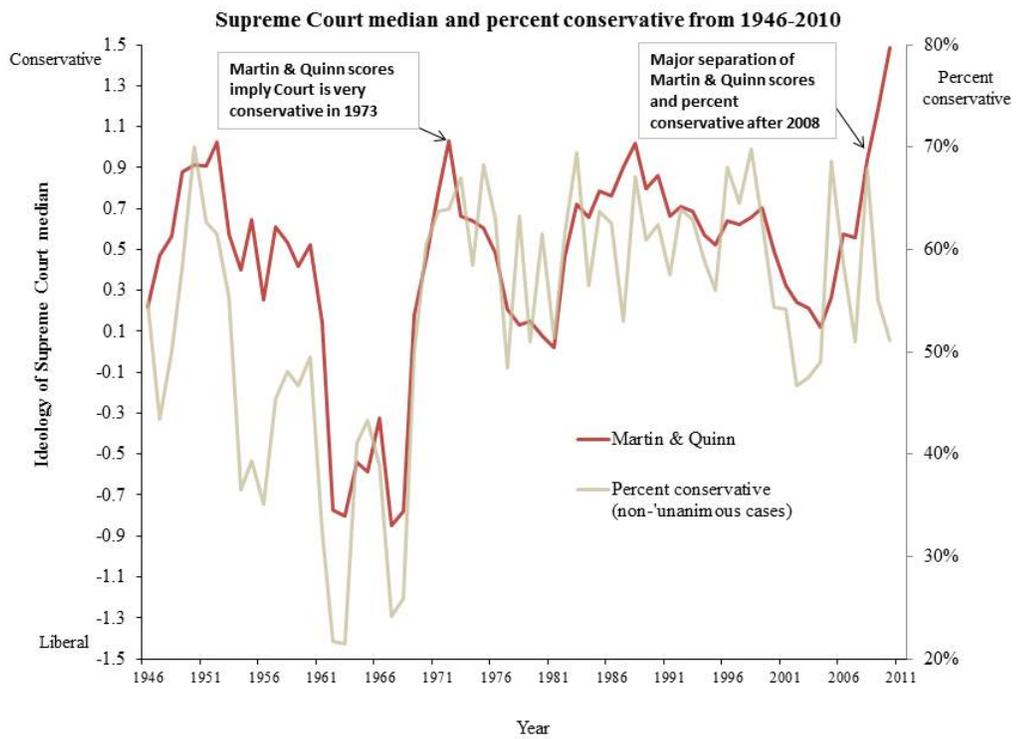


Figure 1: MARTIN AND QUINN ESTIMATES OF SUPREME COURT MEDIAN OVER TIME

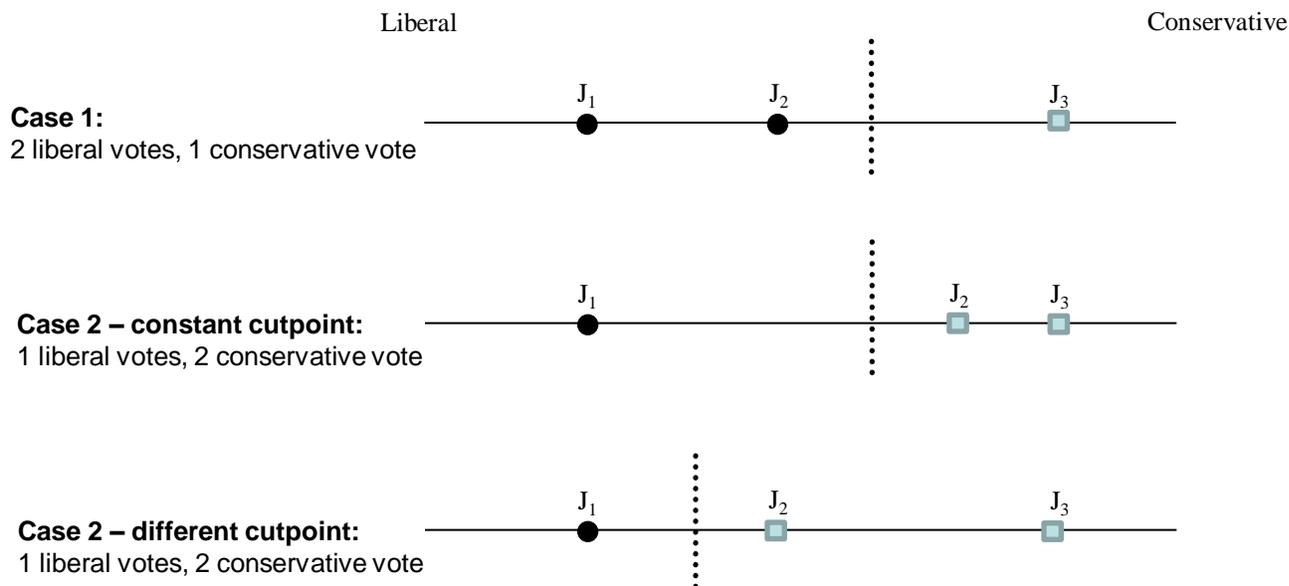


Figure 2: DIFFICULTY IN IDENTIFYING PREFERENCE CHANGE OR CUTPOINT CHANGE

pressing is whether they are comparable across time. Many applications that use Martin and Quinn scores use them because they are “on a comparable scale over time” (Martin and Quinn 2007, 366), because they “allow for comparisons of ideological positions for justices who never served with each other” (Bartels 2009, 490) or allow for “valid comparisons of ideology across justices and across time” (Bartels 2011, 154). These statements are true, however, only if “the distribution of case characteristics is constant over time” (Ho and Quinn 2010, 845; Bailey 2007).

Figure 2 illustrates the centrality of the constant case characteristic distribution for Martin and Quinn. The top row shows ideal points of three justices on “Case 1”, a case on which two of the justices voted liberally and one voted conservatively. Suppose we assume that

justices' ideal points can vary over time (as most work on the Court does) and consider possible ideal points on "Case 2", a case on which one of the justices voted liberally and two voted conservatively. In the first scenario, the case cutpoints on Case 2 is the same as for Case 1 and this means that justice 2 has moved to the right. However, the second scenario shows a situation in which the case cutpoint has moved left and justice 2 has not moved at all. Both scenarios for Case 2 are logically possible and, indeed, highly plausible as we could well imagine cases that have similar ideological cutpoints as earlier cases and cases that differ. For measurement, however, deciding which scenario is most accurate is crucial. Looking at the vote tally on Case 2 of two conservatives versus one liberal provides no guidance and we must rely on some external assumption or information. Martin and Quinn's approach implicitly assume that only scenario 1 is true, an incredibly strong assumption.<sup>1</sup>

These theoretical concerns manifest themselves in implausible preference estimates. Figure 1 shows their estimates for the Court median over time and, for reference, the percentage of non-unanimous Supreme Court decisions that were conservative. Higher values indicate a more conservative Court median. The estimates imply the Court reached a conservative peak in 1973 that it has seldom reached before or since. This is hard to square with the fact that during this period the Court was generally considered rather liberal and produced two of its most liberal decisions ever: in *Roe v. Wade* (1973) the Court said that there is a constitutional right to abortion and in *Furman v. Georgia* (1972) the Court imposed a nationwide moratorium on the death penalty. The Martin and Quinn scores also have a dramatic move to the left from 1973 to 1981, something not generally consistent with conventional views on

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<sup>1</sup>More precisely, their approach assumes that the distribution of votes is the same across terms

the Burger Court and inconsistent with Grofman and Brazil (2002) multidimensional scaling and Bailey (2007).

Issues of intertemporal comparability become particularly pressing when Martin and Quinn scores show plausible yet highly debatable shifts such as the sharp turn to the right evident in the figure after 2008. This shift is not at all reflected in the percent conservative data. In Section 3 I discuss at length whether the underlying realities of the Court are consistent with the shift portrayed in Martin and Quinn’s measure.

Concerns about inter-temporal comparability lead Ho and Quinn (2010, 846) to say in “How Not to Lie with Judicial Votes” that “inferring meaning into cardinal values is misguided” and to recommend that the Martin and Quinn measures should be used as ordinal measures. If accepted, this claim is highly consequential for the statistical literature on the Supreme Court as the scores (and their “judicial common space” offshoots) have become a mainstay of empirical analysis.<sup>2</sup>

There are two directions one can go in response to Ho and Quinn’s critique. One is to accept it and to use Martin and Quinn scores only as ordinal measures. The question then becomes whether the additional complexity associated with calculating and interpreting the scores is worth using them over simple measures of the percent of time a justice votes conservatively, which generally control for agenda effects and provide ordinally accurate rankings of justices within terms or natural Courts (Chiou and Imai 2008, 6).

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<sup>2</sup> Martin and Quinn (2002) has been cited 454 times according to Google Scholar as of January 2012. Judicial common space scores (Epstein, Martin, Segal and Westerland 2007) are based on a mapping of Martin Quinn scores onto the first dimension Poole and Rosenthal common space scores. Although using the first dimension of Poole and Rosenthal scores seems natural, it is actually quite controversial. Segregationist southern senators such as James Eastland (D, MS) are moderates on Poole and Rosenthal’s first dimension. It seems more apt to use Poole and Rosenthal’s second dimension (on which these members of Congress were arch-conservative) to characterize political preferences relative the the Court (Bailey 2007).

There are several benefits of ordinal Martin and Quinn scores over percent conservative scores. First, as with any item-response theory (IRT) model and unlike percent conservative scores, Martin and Quinn ordinal scores do not weight all votes equally. Those votes that do not divide justices according to “ideology” get a discrimination parameter near zero which decreases their influence in the calculation of preferences. Second, the dynamic elements of the model use information from previous periods to keep estimates from moving too much. Practically, this means that if two justices vote conservatively a similar percentage of time in a given term then the one who was more conservative in the previous term is likely to be estimated as more conservative in the Martin and Quinn scores. Third, the Martin and Quinn ordinal scores can deal effectively with situation in which justices do not vote on the same cases in a given term. Finally, Martin and Quinn scores also come with measures of uncertainty. Uncertainty measures do not naturally come with percent conservative scores although they could be produced.

Despite these advantages, ordinal Martin and Quinn scores do not differ dramatically from ordinal rankings based on percent conservative scores. The correlation of the ordinal ranking from Martin and Quinn and percent conservative for the period 1950 to 2011 is 0.93. Figure 3 shows a scatterplot of ranks produced by the two approaches. The size of the circles reflects how many observations are at a given point and the results illustrate how similar the ordinal rankings are. And, if one were to calculate the percent conservative scores based on a given issue area (civil liberties, for example) it seems highly plausible that one could generate a measure that makes up for some of the simplicity of the measure with a more targeted sample.

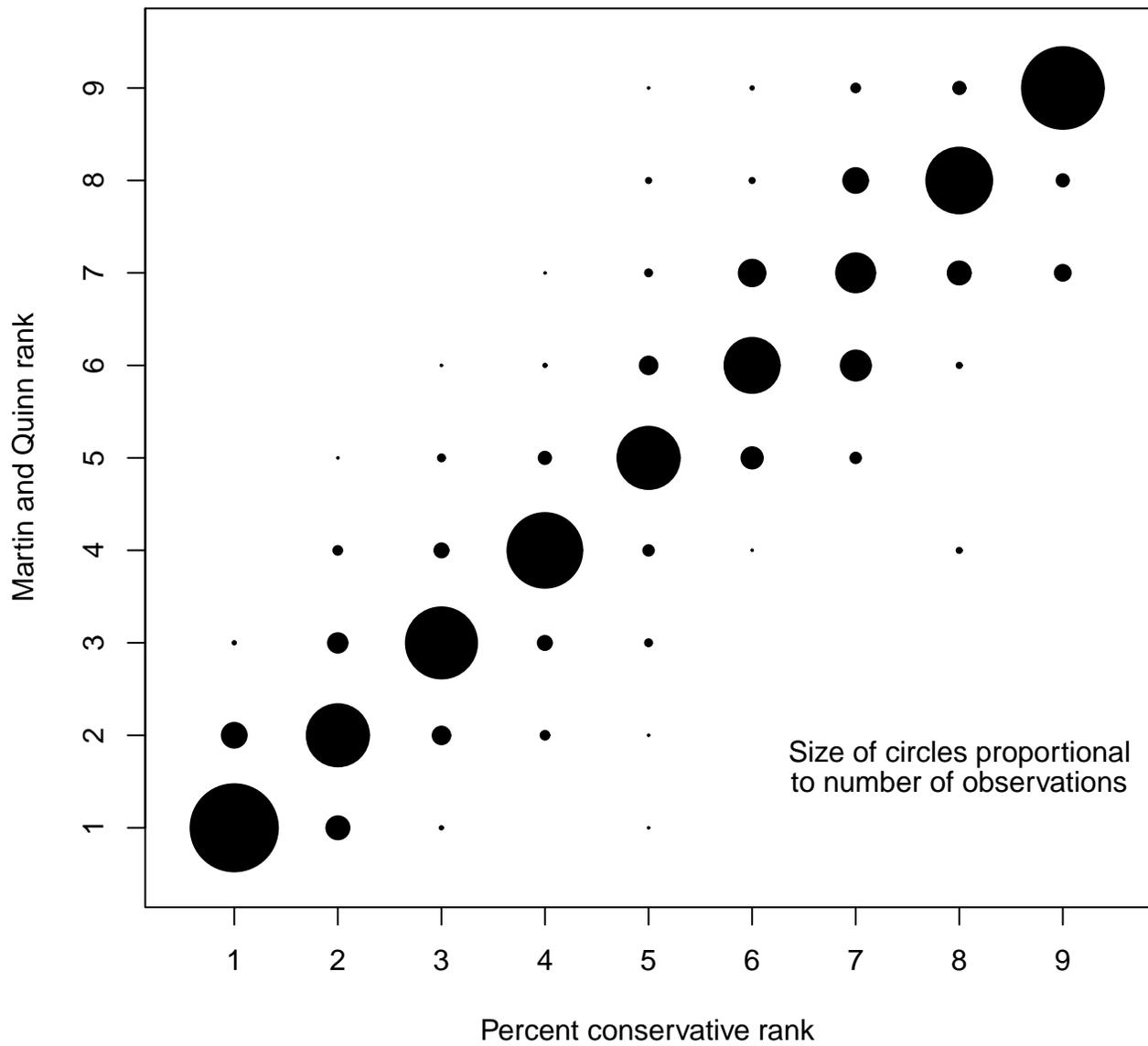


Figure 3: ORDINAL MARTIN AND QUINN SCORES VERSUS PERCENT CONSERVATIVE

This paper goes in another direction in response to Ho and Quinn’s critique. It focuses on what can be done to generate intertemporally comparable scores and presents a bridging approach to accounting for agenda change.

**Polarity** Another challenge in estimating judicial preferences is determining the ideological polarity of cases (Fischman and Law 2009, 154- 166; Ho and Quinn 2010, 836). That is, how do we know what are liberal and conservative votes? Like pornography, we may know a liberal vote when we see it, but like pornography is difficult to devise clear criteria (see *Jacobellis v. Ohio*(1964)). As *Lady Chatterley’s Lover* wove a risqu story into literature, *Gonzales v. Raich* (2005) wove pro-federal government principles into a decision to overturn a California law allowing medical marijuana. What are we to do? Do we deem *Raich* liberal because it favored a federal law over a state law, something liberals typically favor? Or is it a conservative decision because it ruled against medical marijuana? There may be no cut and dry answer.

There are three approaches to coding the ideological polarity of cases. Rule-based coding from Spaeth (2011) is widely used. Spaeth’s Supreme Court Database codes a decision liberal if the decision favors an accused criminal, a civil rights claimant (such as someone making claims on behalf of minorities, homosexuals, poor people or some other “underdog”), the government in most takings cases, a free speech or privacy claim and so on. Usually this is unproblematic, but there are cases where the process strays from common political understanding. On campaign finance cases, for example, Spaeth codes voting to strike the 2004 Bipartisan Campaign Reform Act as liberal vote as it favors speech rights even though this position was much more associated with political conservatives. It is also possible that

subjectivity enters as coders may code according to what they think they directionality “should” be based on how the vote turned out (Harvey and Woodruff 2011).

The second approach is automated coding; Fischman and Law (2009) call this the “agnostic” approach. Many IRT models follow this approach. A model is posited (such as the one discussed below) in which there is a parameter that identifies the polarity of the case. If the parameter is estimated to be positive, the decision is conservative; if the parameter is estimated to be negative, the decision is deemed liberal. The merit of this approach is that it does not rely on manual coding. If liberals are in the majority on a case and they are opposed by conservatives, the case polarity parameter will have a discrimination parameter saying the vote is liberal. If conservatives are in the majority opposed by liberals, the opposite will be true. If some mix of liberals and conservatives vote for something then the polarity parameter will be near zero simply indicating that we can’t tell what the ideological polarity of the vote is. Simplifying only a little, automated coding says a decision is liberal if liberals voted for it and conservatives voted against.

The agnostic approach suffers from a serious risk of circularity. An extreme example is *U.S. v. Comstock* (2009) in which seven justices voted to uphold a federal law on sex offenders and Scalia and Thomas voted to strike the law on the grounds that it was not effectuating an enumerated power. An agnostic approach would comfortably code this as a liberal vote as it was the more liberal justices lined up against the most conservative justices. In fact, though, the polarity was the opposite, if anything as Scalia and Thomas were effectively voting to strike a law that increased penalties on sex offenders. Presumably their policy preferences were for states to impose such penalties, but that is not what they were voting

on. They voted to strike the law which would have decreased punishment. Clearly, a lot of the interesting implications of such behavior, especially with regard to effect of policy attitudes versus law on voting can get lost once the majority's vote is classified as a liberal vote.<sup>3</sup>

A third approach is to use non-Court actors to identify the ideological polarity of Court cases. Harvey and Woodruff (2011) look to external sources for coding polarity by using the ideological polarity implied by congressional votes on statutes that made their way to the Court. Even if the ideological polarity of case can be argued either way philosophically, the politics of the underlying statute sheds light on the practical ideological implications of a case. If liberals in Congress like something and conservatives don't, it's a liberal decision. If the liberals and conservatives don't disagree, then the case before the Court is not ideological.

**Functional form of preference dynamics** Most scholars believe judicial ideal points evolve over time (Epstein, Hoekstra, Segal and Spaeth 1998; Bailey 2001, 2007; Martin and Quinn 2002). There are several different ways to model the preference change. One is to estimate preference change in terms of a polynomial function over time (Bailey 2007; Poole and Rosenthal 1997). Such a functional form can, depending on the degree of the polynomial, fit a broad range of non-linear and non-monotonic preference change. And the functional form implicitly imposes smoothing from one period to the next, consistent with the idea that while there may be preference change, preferences from the previous period nonetheless

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<sup>3</sup> *Oregon v. Ice* (2009) is another good example. Ginsburg, joined by Stevens, Kennedy, Breyer and Alito, argued that the Sixth Amendment allows judges rather than juries to do the fact-finding necessary for imposing consecutive sentences on criminal defendants. They were opposed by Scalia, Souter, Thomas and Roberts arguing against the sentences, as least as imposed by the judge. The minority in this case was arguing for a potentially more lenient outcome, yet was comprised of more conservative justices than the majority.

provide useful information about preferences in the next period. A major limitation of fitting preference change with a polynomial equation is that the approach will not handle discrete shocks to preferences very well. That is, suppose for example that justices shift left or right in response to an election outcome. The polynomial approach will smooth out this shift, something that could be detrimental to many research questions.<sup>4</sup>

Martin and Quinn estimate preferences separately for each term for each justice, but incorporate information about preferences in the previous term as Bayesian priors on the estimates. This “smooths” preferences over time. In contrast to the polynomial approach, preference estimates can still shift discretely, although not as much as they would without priors. One of the challenges is “tuning” the model by selecting a smoothing parameter. This is more of an art, than a science (Martin and Quinn 2002, 147).

**Heterogeneity** In addition, questions about dimensionality of judicial preferences lurk in any measurement discussion. Changing dimensionality could induce appearances of preference change where they may be none. Farnsworth (2007, 1896) provides an example:

Suppose, to take a simplified example, that Justice Kennedy tends to vote for the government in cases involving criminal procedure, but against the government in cases involving free speech, while Justice Rehnquist—a less libertarian sort of conservative—tends to vote for the government in both situations. (Both assumptions happen to be accurate.) Imagine that in term  $T$ , there are many criminal procedure cases (where the two Justices vote the same way) and few speech cases (where they don’t). Then in term  $T + 1$ , there are lots of free speech cases. Kennedy’s preferences may appear to drift to the left relative to Rehnquist’s when they haven’t really changed at all.

If justices’ preferences differ across substantive issue areas, a one dimensional model could conflate preference change and agenda change. Martin and Quinn (2002, 146) present ev-

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<sup>4</sup>For this reason Bailey and Maltzman (2011, chapter 6) estimate preferences in separately in the period just before and just after an election in order to assess separation of powers shifts related shifts in Court behavior.

idence inconsistent with such a worry, as the “first” dimension in their models seems to explain across multiple issue areas reasonably well. Lauderdale and Clark (2012), however, find that when each case is defined in relation to a substantive area and the cases it most cites, there are definite signs of multidimensionality as the identity of the Court median varies substantially across specific cases, even within a term.

Another way in which there could be multiple dimensionality is that justices could value legal principles and these principles could ebb and flow in cases across issues. This would make a cross-issue area comparison inapt as a means of testing multidimensionality. However, if there are a set of cases where all justices deviate from their one dimensional ideologies in predictable ways then this would likely show up in a multidimensional scaling such as Grofman and Brazil (2002, 58). On the whole, they find this not to be the case as the first dimension of preferences they estimates is overwhelmingly more predictive than the second or higher dimensions.

If justices are indeed influenced by legal values, but the weight they place on them varies idiosyncratically across justices these factors will be hard to capture in one or multiple dimensional scaling. Yet important judicial behavior could lurk in such a situation. For example, if it is indeed the case that Kennedy is, as in Farnsworth’s example above, distinctively protective of free speech claims, this could not only have the measurement implications Farnsworth highlights, but it could have implications for the extent to which justices’ policy motivations are similar to, say, those of members of Congress. Bailey and Maltzman (2008, 2011) identify a large number of justices who systematically deviate from their one dimensional preferences when precedent, congressional deference and free speech are involved.

## 2 A bridging approach to preference measurement

This paper addresses each of the major challenges described above. It uses a bridging approach to deal with agenda change; it uses political position taking to identify ideological polarity of cases; it uses a prior-based flexible approach to model preference dynamics and it is expandable to include covariates that capture an important subset of factors that may not load on the standard left-right ideological dimension. I discuss each of these in turn in this section.

**Controlling for agenda with bridge observations** As discussed above, the challenge in using Martin and Quinn preference measures for the Court is an implicit assumption required that the agenda does not change over time.<sup>5</sup> If, however, we can control for agenda change, we may be able to create measures that are comparable over time. We do not need the agenda to be identical in each period; we simply need to ensure that the agenda change is identifiable.

Therefore this paper builds on previous bridging estimates (Bailey 2007; Bailey and Maltzman 2008, 2011) to identify agenda change by incorporating bridging information that pins down preference changes over time. The analogy – and it is a very close analogy – is to test standardization. A test score based on one set of questions is hard to compare to another score based on a different set of questions. If we gave identical tests we could compare scores, of course, but that is infeasible for standardized tests that cannot simply give identical tests year in and year out. They can have some questions overlap, though, and this is enough to identify relative test performance as these questions pin down ability across tests. For the

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<sup>5</sup>This critique also applies to Poole and Rosenthal's NOMINATE measures for Congress (Bailey 2007, 438).

Court case, we will identify certain “questions” (cases) that have been “asked” over time of justices on multiple Courts. We will also be able to identify cases that are to the left or right of previous cases, information that also helps pin down agenda and preference change over time.

We use two sources of bridging information. One is the positions taken by justices on cases decided by earlier courts. It is relatively common for justices to state a clear position about an earlier decision. For example, in *FEC v. Wisconsin Right to Life* (2007) Scalia stated that *Austin v. Michigan Chamber of Commerce* was “wrongly decided”; in *Allegheny v. ACLU* (1989) Justice Kennedy wrote “I accept and indeed approve both the holding and the reasoning of Chief Justice Burger’s opinion in *Lynch* [*Lynch v. Donnelly*] (1984).” These observations were collected by reading all opinions from 1950 onward and looking for instances in which a justice took a clear position on a previous case.

The second source of bridging information is about the relative position of cases over time. It is not unusual for case law to evolve in an ideologically understandable way. For example the Court held in *Miller v. Alabama* (2011) that juveniles convicted of murder cannot be subject to mandatory life sentences. The cutpoint of this case was clearly to the left of *Graham v. Florida* (2010) in which the Court ruled against mandatory life sentences for juveniles for crimes other than murder. To see this, consider the vote of a liberal on *Graham*. Does that liberal vote imply support for the liberal position on *Miller*? It does, as voting against mandatory life sentences for murder implies opposition to mandatory life sentences for lesser crimes.

The movement of case cutpoints is not the same as the movement of Court jurisprudence.

The Court held against execution of people for crime committed when they were under 16 *Thompson v. Oklahoma* (1988). A year later, in *Stanford v. Kentucky* (1989), the Court allowed execution of those convicted of crimes committed between the ages of 16 and 18. The Court did not move left in *Stanford*, but the cutpoint did as justices voting liberally on *Stanford* (advocating against execution of minors over 16) is logically consistent with voting liberally on *Thompson* (opposing execution of individuals under 16). (The Court eventually did move left in *Roper v. Simmons* (2005) holding that it is unconstitutional to execute people for crimes committed under 18.)

We have identified [] instances in which a case cutpoints can be linked in this manner. Three areas provide many observations. On abortion, the Court has considered many cases in which some restriction on abortion short of banning it has been considered. If a justice was liberal on such a case (whether or not the Court opinion was) this implies that he or she believed *Roe* extends not only to the right to abortion, but also, for example, to the right to abortion in a non-hospital setting. One cannot get to such a holding without also upholding *Roe* which implies the cutpoint is to the left of *Roe*. A similar logic applied for many civil rights cases. For example, if a justice voted liberally on busing, that meant he or she had to be liberal on *Brown v. Board of Education* (1954) as support for de-segregation is a necessary (but not sufficient) pre-cursor for support for mandatory busing. In our terms, this means the cutpoint on busing cases and votes was to the left of the cutpoint in *Brown*. There are also many death penalty votes and cases with cutpoint constraints. The cutpoint on a vote in Congress expanding the death penalty to “drug kingpins” will be to the right of the cutpoint in *Gregg v. Georgia*. Liberals on *Gregg* were willing to strike all death penalties

even after post-*Furman* reforms; they would certainly be liberal on efforts to expand the death penalty. A list of cutpoint constraints is available in the supplemental appendix.

This information is incorporated in the model by imposing a restriction that the estimated cutpoints reflect the substantive relation identified in the historical record. Recall, as in Figure 2, that vote data alone is not enough to identify preference change, but that if we know something about movement of cutpoints we could, for example, incorporate that information to distinguish between various scenarios in the figure. The appendix provides details on how this information is incorporated in the statistical model.

Some might object that use of bridging information to identify preference change over time yields unrealistic counterfactuals. Are we trying to say what Justice Holmes would make of GPS surveillance? Or what Justice Taney would think of Twitter? That is not what we are doing. There is no time traveling. Our bridge observation of Justice Thomas writing in 1992 that *Roe* was “wrongly decided” does not tell us what Thomas thought about the case in 1973 when it was originally decided. What it does tell us is what Clarence Thomas in 1992 thought of the case and this has implications for the ideological location of the Court (or at least this one member of it) in 1992 relative to 1973.

The reliance of this approach on external data is both a strength and a weakness. It is a strength in the sense that if anyone has specific reasons to justify thinking that the Court has moved to the right or left, these can be incorporated into the estimates. That is, if someone believes the Court has become more anti-accused and can identify either a case that is clearly to the right of a previous case (based on the substance of a ruling) or finds instances of a justices critiquing earlier liberal opinions, then this information can be

incorporated and used to help pin down relative movement over time. The use of this data also creates challenges, including not only the effort of identifying such external information, but also the possibility for subjectivity to enter in the collection or coding of data. That the data is available in the supplemental material is one check on this concern, but some level of such concern may well be inherent in the approach.

**Case polarity** This paper addresses the polarity questions by using the policy stands taken by elected officials to identify the liberal-conservative valence for Court cases for which the valence is debatable. This follows the insight in Harvey and Woodruff (2011) that external actors provide a useful benchmark for coding Court cases provides guidance for difficult cases and can allow us to identify ideological polarity even if nine justices do not provide clear evidence of it, either due to non-ideological factors or by chance.

In practice, codings typically follow Spaeth liberal-conservative codings with exceptions for areas where the Spaeth codings conflict with underlying political positions. The major areas are campaign finance and government funded marketing. For campaign finance related cases, Spaeth codes votes to uphold the limits on contributions or expenditures as conservative votes (as these are limiting speech and Spaeth coding rules take protecting speech as necessarily liberal). The political valence of campaign finance regulations is the opposite: overwhelmingly the political supporters of limits on contributions or expenditures come from the left and opponents of such laws come from the right. We therefore re-code these cases accordingly (as do Epstein and Segal 2006). On the marketing cases, the Spaeth coding rules take votes to favor mandatory government marketing programs (and the fees inherent in them) as conservative votes (as these are interpreted as limiting the speech rights

by forcing farmers to support certain kinds of speech and the Spaeth rules take limits on speech as being inherently conservative). Here, the political coalition is again the opposite, with opposition to these programs coming from the right, as conservatives have opposed the government intervention in the economy inherent in the programs.

**Preference dynamics** For each  $\theta_{it}$  we implement a Bayesian prior based on the ideal point in the previous period,  $\theta_{i,t-1}$ . The variance of this prior determines how much smoothing occurs. If it is set at a very large value, then almost no smoothing occurs; if it is set at a very small value, then preferences change very little from one period to the next. As discussed in Martin and Quinn (2002, 147) specific estimates can be sensitive to the setting of such a parameter and there is no consensus way to determine its value; as with Martin and Quinn, I set this value at a point at which the estimates do indeed move from period to period, but not too dramatically. Users of these scores (and Martin and Quinn scores) should note, though, the role this smoothing parameter plays.

**Heterogeneity** This paper addresses possible multiple dimensionality in two ways. First, it reports estimates based on models that include covariates that account for at least some important determinants of voting that may not reflect standard left-right ideological conflict. For example, suppose it is the case that some justices do indeed respect precedent and vote in favor of precedent against their ideological predisposition. These votes will appear moderate in left-right terms, but do not necessarily reflect moderation in conventional policy-ideological terms. As the agenda moves from having more or less cases in which precedent is determinative will yield behavior that looks ideologically varied when in fact the underlying

ideological predispositions of justices do not vary.

I therefore report results from models in which we use the non-policy variables included in Bailey and Maltzman (2008, 2011). They are precedent, congressional deference and free speech. I also add additional variables relating to deference to the executive and to dealing with Sixth Amendment challenges, areas in which some argue that some justices have distinctive behavior. As described in the statistical model below, a variable is added for each of these concepts. The precedent variable is +1 if the parties or justices on the liberal side advocated overturning precedent; it is -1 if the parties or justices on the conservative side advocated overturning precedent. The congressional deference variable is +1 if the parties or justices on the liberal side advocated overturning a congressional statute; it is -1 if the parties or justices on the conservative side advocated overturning a congressional statute. The free speech variable is +1 if the parties or justices on the liberal side advocated limiting speech rights; it is -1 if the parties or justices on the conservative side advocated limiting speech rights. The executive deference variable is +1 if the parties or justices on the liberal side advocated against a federal party to a case; it is -1 if the parties or justices on the conservative side advocated a against federal party to a case. The Sixth Amendment variable is -1 if the parties or justices on the liberal side advocated on behalf of an accused person's rights under the confrontation clause or right to a jury; there are no cases in which invocation of these rights implied a conservative outcome.<sup>6</sup>

These estimates are offered more in the spirit of a robustness check than a final word for two reasons. First, it is impossible to come up with a set of covariates that comprehensively

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<sup>6</sup> Sixth amendment cases are identified primarily based on "LawSupp" codes in the Supreme Court database of 213 and 215.

captures non-ideological factors. Certainly the set here is not comprehensive. Second, the meaning of the “preference measures” is nuanced and whether one wants a measure net of legal factors depends very much on context. For example, suppose again that justices are indeed influenced by precedent and this produces moderate-looking votes. At one level we could describe these justices as, say, ideological liberals who respect precedent. We could equally validly say that a liberal who respects precedent is effectively a moderate as he or she does not vote consistently liberal as a liberal justice who ignores precedent would.

The second measure taken to deal with potential multidimensionality is to limit the data set to cases related to the major topics addressed by the courts in the post-war area, including crime, civil rights, free speech, religion, abortion and privacy.<sup>7</sup> Focusing on these issues allows us to focus on the most relevant areas of political-judicial exchange and to minimize chances that our results are affected by behavior on secondary issues that did not necessarily have the same structure of preferences. I also begin in 1950 as not to conflate the ideological splits of the New Deal era that revolved around economic legislation that were quite different than those of the post 1950 Court.

**Statistical model** This bridging information is incorporated into a standard item response theory model of ideal points. The model builds on the canonical formulation of latent preferences in the ideal point estimation literature (see, e.g., Bailey 2001). The derivation and further details are in the appendix. The core of the model is

$$\text{Prob}(y_{itv} = 1) = \Phi(\alpha_v(\theta_{it} - \kappa_v))$$

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<sup>7</sup>Lauderdale and Clark (2012) go much further and estimate case-specific voting propensities based on the case issue area and the cases cited in the opinion.

where  $y_{itv}$  is 1 if justice  $i$  votes for the conservative position in term  $t$  on case  $v$ ,  $\alpha_v$  is the vote “discrimination” parameter (see appendix for more details),  $\theta_{it}$  is the ideal point of the justice at the time of proposal (the higher the value, the more conservative the justice) and  $\kappa_v$  is the vote cutpoint. For cases and votes for which we have information on the relative locations of the cutpoints, we constrain the cutpoints to satisfy the inequality constraint implied by the information.

The model that includes covariates is

$$Pr(y_{itv} = 1) = \Phi(\alpha_v(\theta_{it} - \kappa_v) + \pi_i Precedent_v + \delta_{1i} DefCongress_v + \delta_{2i} DefExec_v + \sigma_{1i} Speech_v + \sigma_{2i} Sixth_v) \quad (1)$$

where  $y_{itv}$  is 1 if individual  $i$  takes a conservative position at time  $t$  on vote  $v$ ,  $\alpha_v$  is the vote discrimination parameter,  $\theta_{it}$  is the policy preference of individual  $i$  at time  $t$ ,  $\kappa_v$  is the vote “cut-point,”  $\pi_i, \delta_i$  and  $\sigma_i$  are the weights justice  $i$  places on precedent, deference (to Congress and the executive branch, respectively), and certain constitutional claims (speech and Sixth Amendment, respectively).  $Precedent_v, DefCongress_v, DefExec_v, Speech_v$  and  $Sixth_v$  are the precedent, deference to Congress, deference to the executive, speech and Sixth Amendment variables, coded as described above.

The model is estimated with Markov Chain Monte Carlo methods using Matlab code available in the supplemental materials. A modified Gibbs Sampler algorithm is used to repeatedly sample from the posterior density of the parameter distribution. The mean and standard error of the distribution of the parameters can then easily be derived from the mean and standard error of the sampled observations.

### 3 Data

The court voting data comes from Spaeth (2012). There are 32,318 observations of votes by individual justices on 3,701 cases from 1950 to 2011. In order to ensure that the data corresponds to the assumption of unidimensionality, I limit the sample to cases that are conventionally associated with the standard left-right splits on the Court.<sup>8</sup> Only cases that are relatively salient are selected as well.<sup>9</sup>

There are 1,611 observations of justices taking positions on previous cases. There are also four observations of justices taking positions on previous congressional roll votes and 34 observations of Robert Bork taking positions on cases or roll calls at the time of his nomination or before. We estimate a single ideal point for Bork (no other failed nominee had sufficient number of positions that we could find).

The inter-institutional elements of the estimation use votes and bridge observations for members of Congress. There are 529,272 individual level observations of congressional votes on 1,797 roll call votes in Congress on social and court issues (covering the dimension of issues in the Supreme Court data used). There are also 24,728 bridge observations of members of Congress taking positions on Supreme Court cases. There are 721 individual level bridge observations of presidential positions on congressional roll call votes and 641

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<sup>8</sup>I use the Spaeth (2011) database and limit cases to those *issueArea* < 6 (criminal procedure, civil rights, First Amendment, due process and privacy) and not related to Indian affairs (*issue* equals 20150 or 20160). This case selection excludes cases on unions, economic activity, judicial power, federal taxation and so forth. Citations are the unit of analysis (ANALU = 0 in Spaeth's data set) and add split-vote decisions (ANALU = 4) when there are bridging observations. *Bakke* is a prominent example of a case with a split votes and many members of Congress taking positions on one or the other (or both) of the main holdings. I do not include memorandum cases and decrees (DEC TYPE = 3 or 4).

<sup>9</sup>Case are selected if at least one of the following is true: discussed directly in the *Harvard Law Review's* annual court review, included as a landmark case in the Legal Information Institute's database of cases (see [supct.law.cornell.edu/supct/cases/name.htm](http://supct.law.cornell.edu/supct/cases/name.htm)), coded as a salient case in Epstein and Segal (2000), included in the CQ's key cases list, a President or member of Congress or non-contemporaneous justice took a position on the case, the case has clear cutpoint relation to another case, the case implicates precedent, deference or speech as coded.

bridge observations of presidents taking positions on Supreme Court cases. More details are in the supplemental material.

## 4 Ideal points

**Justice ideal points** Figures 4 through 6 display the estimated preference estimates for justices from 1950 onward. A 90 percent confidence interval is indicated with grey lines. The estimates are available in the supplemental material. The ideal points are generally what one would expect - Justice Douglas on the left and Justice Thomas on the right and so forth. They also exhibit clear non-linearities: Justice Black was more or less stable until around 1967 when he shot to the right. Frankfurter was liberal until his decisive move to the right from 1958. Justice White has the most jagged trajectory with a secular rightward shift punctuated by a move left in 1978.

**Supreme Court median over time** Figure 7 plots the Court median for the core model and the most recent available Martin and Quinn scores. To facilitate comparison, the average median has been subtracted from each set of measures.<sup>10</sup>

If we accept a strong form of the Ho and Quinn critique, we would and only use Martin and Quinn scores ordinally. Others, however, do use the Martin and Quinn scores cardinally (e.g. Epstein, Martin, Segal and Westerland 2007; Martin, Quinn and Epstein 2005; Silver

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<sup>10</sup>The variance of medians is similar across measures; the variance of individual ideal points is not the same as Martin and Quinn scores have a broader range. If the medians are normalized by the standard deviation of the individual ideal points then the Martin and Quinn scores are compressed around their mean without affecting movement relative to itself. Note that Martin and Quinn date cases by the Supreme Court term of the decision date. This is not the same as calendar year as Supreme Court terms run from October to September. The 2010 term, for example, covers cases decided from October 2010 to July 2011. The bridging scores use calendar years so as to facilitate bridging between Congress and the Court.

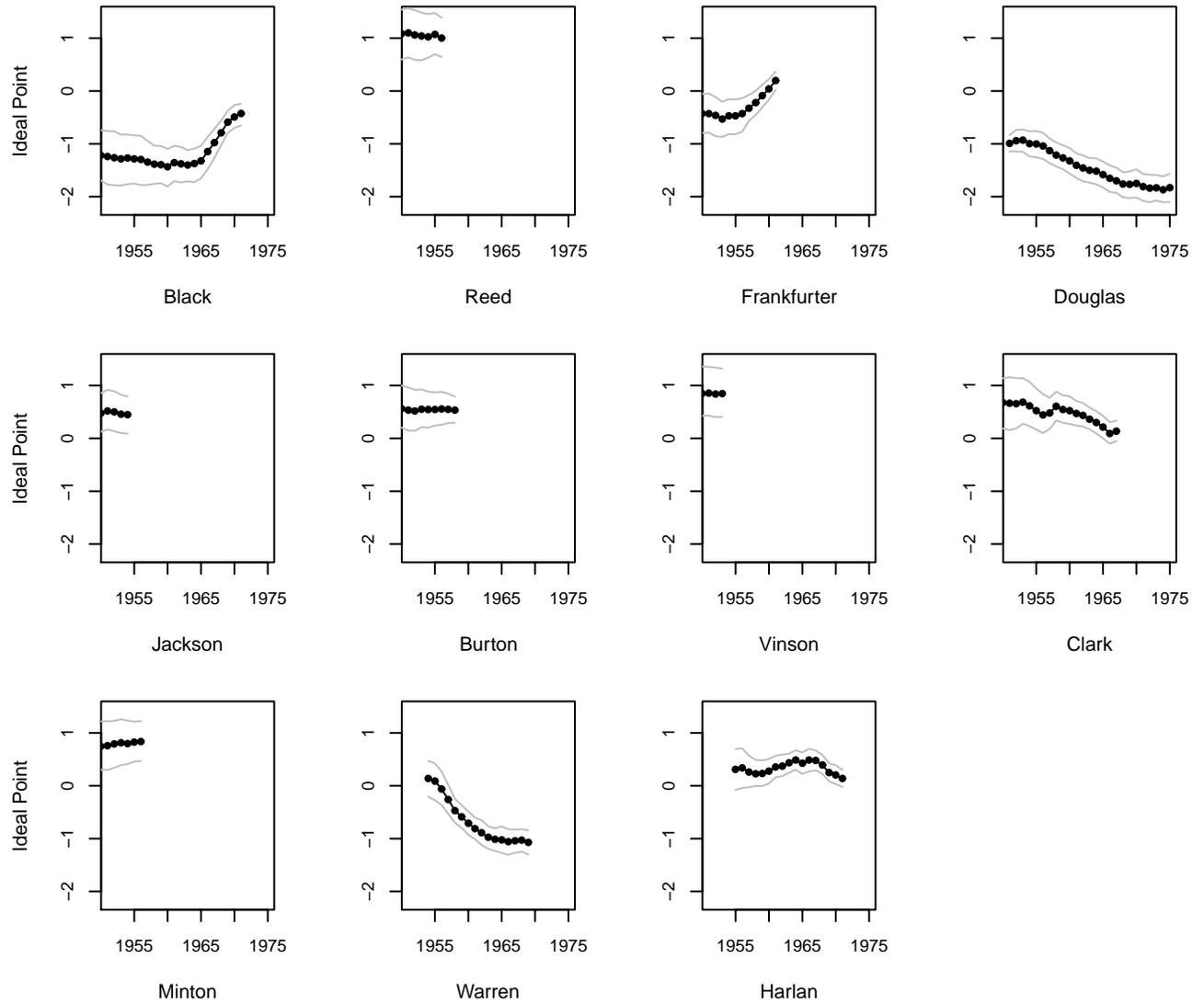


Figure 4: ESTIMATED IDEAL POINTS OF SUPREME COURT JUSTICES, 1950-1975

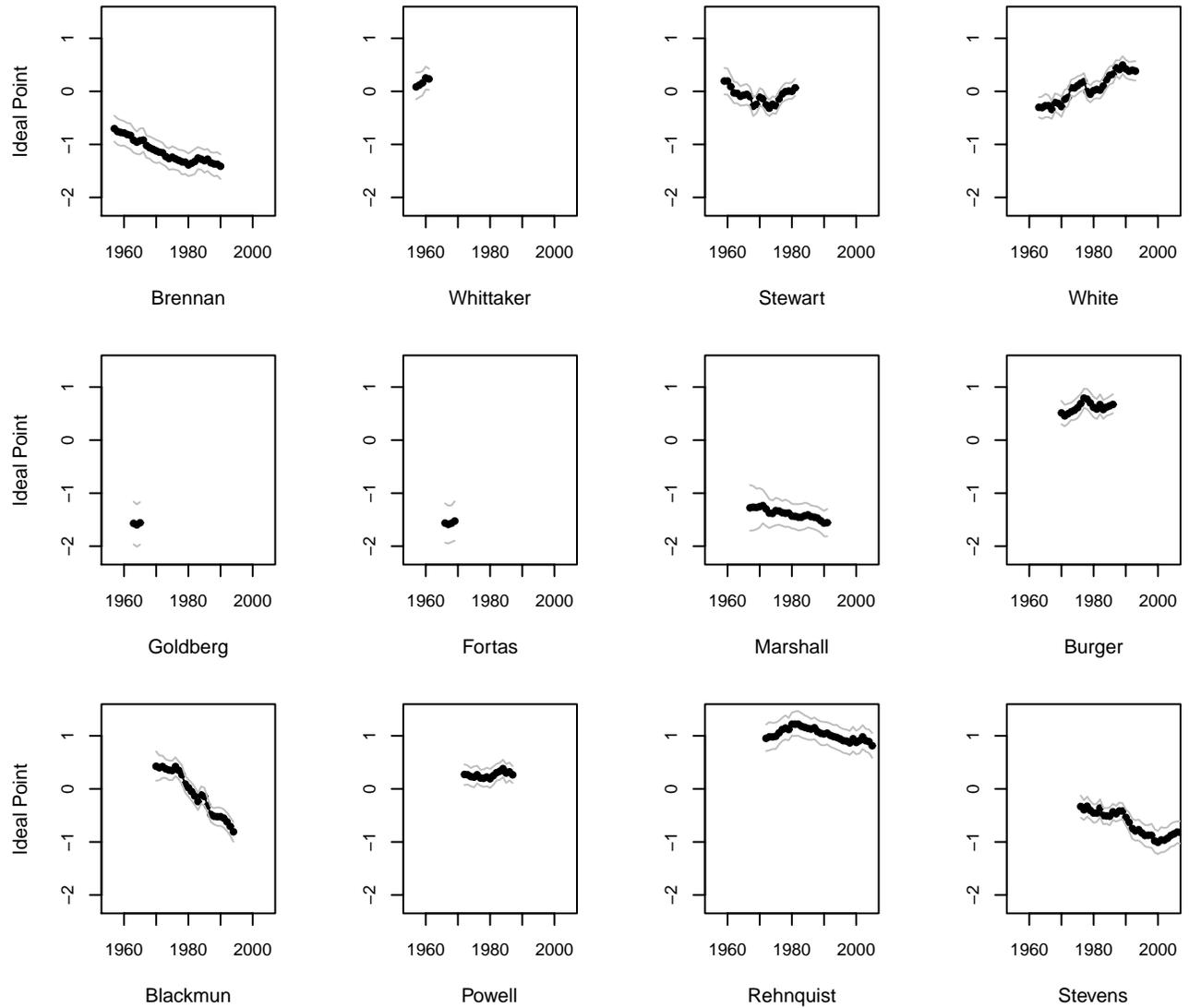


Figure 5: ESTIMATED IDEAL POINTS OF SUPREME COURT JUSTICES, 1955-2005

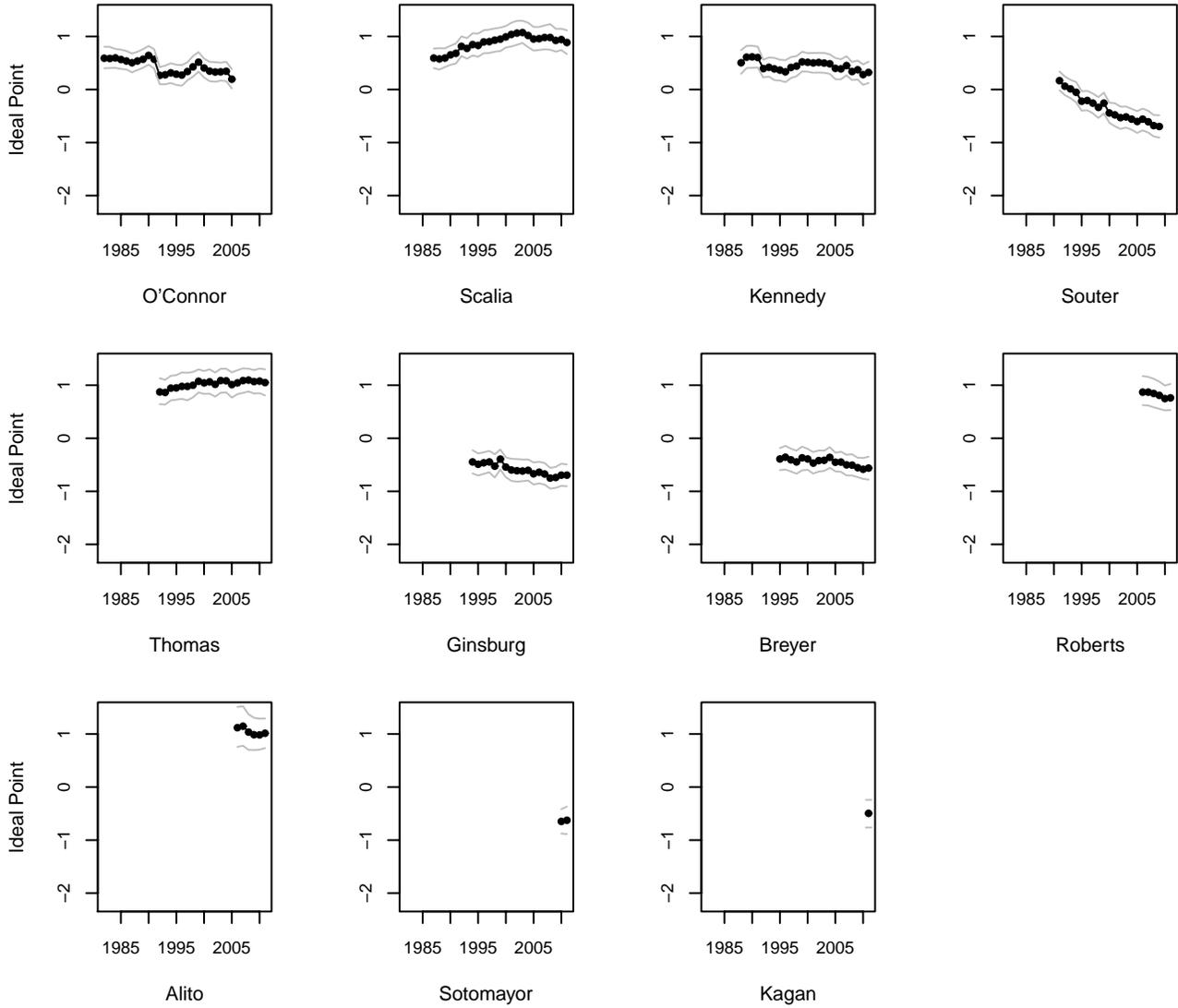


Figure 6: ESTIMATED IDEAL POINTS OF SUPREME COURT JUSTICES, 1982-2011



Figure 7: COMPARISON WITH MARTIN AND QUINN ESTIMATES OF SUPREME COURT MEDIAN OVER TIME

2012) and it is with regard to these applications that the following discussion pertains.

The prime disjunction between the bridging and Martin and Quinn scores is marked conservatism of the *Roe*-era Court and the substantial move to the left from 1973 to 1981. This is not at all apparent in the bridge estimates which show a strong conservative trend in the early 1970s, but one that leaves the Court liberal compared to later Courts. This seems more consistent with general consensus that the Burger Court, while more conservative than the Warren Court, was not historically conservative (see, e.g., Friedman 2011, chapter 9). A second major disjunction is that the Martin and Quinn scores indicate that the contemporary Court is more conservative than any other time since 1937, the earliest date of the Martin and Quinn scores; we return to this later.

**Model with covariates** Figure 7 also includes the medians as estimated from the model that includes the covariates described earlier. These medians are quite similar to the model without the covariates (even as the covariates themselves are statistically significant for many justices). The correlation of medians for the models with and without covariates is 0.97. The ideal points in the model with the covariates are very similar, with a correlation of 0.99. The differences that do exist typically occur when a justice’s unexpected votes are explained by a particular covariate. For example, Justices Thomas and Scalia voted liberally on a number of Sixth Amendment cases (even as liberals voted conservatively). In the model with covariates these votes do not make these justices look as “liberal” and hence their ideal points are shifted to the right for most years. Frankfurter is another interesting case, as his ideal points in the covariate model are more liberal, implying that some portion of his conservative votes are explained by the covariates.

There is no clear way to determine whether the ideal points based on the model with covariates are “better” as it depends on the concept one is trying to assess. If one is interested, for example, in relations between the Court and Congress one is probably better off with a model without covariates as this measures the differences between Congress and justices, regardless of the source of the voting by the Court. In standard separation of powers models, for example, it does matter why justices vote against the policy preferences of Congress, only that they do. On the other hand, if one is trying to identify the “ideology” of justices in a way that is independent of agenda or case characteristics, one may prefer the estimates based on the model with covariates. The judicial preferences can then be adjusted based on the other estimated parameters depending on whether overturning precedent or speech and

so forth are invoked by a given case or line of cases. Lauderdale and Clark (2012) develop a similar line of reasoning in much greater detail.

**Justice Kennedy** An interesting diagnostic is to qualitatively examine instances of measures divergence. Bailey (2007) discusses possible explanations for the divergence of measures in the early 1970s. In this section we consider the divergence around 2010. It is difficult to make such an examination completely dispositive, but considering the measures in light of actual decisions underlying them sheds light on patterns, potential problems and possible solutions.

The Martin and Quinn median estimate moves dramatically rightward after 2005 as Justice Kennedy (the median) was estimated to move from 0.52 (near the average scores of Justices Stewart and White) to 1.49 in 2010 (near Justice Rehnquist at the end of his career).<sup>11</sup> This shift in median is roughly 50 percent larger in magnitude than the movement to the right from 1980 to 1983 and about two-thirds the size of the largest three year shift in the post post-war which occurred from 1967 to 1970. In contrast, the bridging scores indicate Kennedy has been moving left since 1995 and put him near O'Connor's ideal point at the end of her career and substantially to the left of Rehnquist.

Note that the percent conservative in Figure 1 do not track with the Martin and Quinn scores in the most recent period. Under the assumption of Martin and Quinn that the underlying distribution of case cutpoints is constant, the percent conservative should (and usually does) approximate Martin and Quinn movements. That it does not in this time period justifies further examination. The scores presented here do not diverge from percent

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<sup>11</sup>Figure 7 subtracts 0.44 from this median score, the average of the Court medians for the Martin and Quinn scores from 1950 onward.

conservative in this way.

In this context it is useful to consider Kennedy's actual votes and ask whether we can qualitatively discern a movement to the left or right. Note first that many recent prominent conservative rulings supported by Kennedy actually were decided in the 2006 or 2007 terms, terms in which Martin and Quinn scores indicate no change for Kennedy. These include *Parents Involved v. Seattle School District* (holding that Seattle schools could not use race as factor in assigning kids to schools), *Hein v. Freedom From Religion Foundation* (holding that taxpayers had no standing to object to challenge faith-based federal policies), *Morse v. Frederick* (holding that a school could punish a student for holding a sign that said "bong hits for Jesus"), *Ledbetter v. Goodyear* (holding that statute of limitations disallowed challenge to discrimination even if discrimination discovered later), *Bowles v. Russell* (refusing to hear habeas appeals that were filed late even if a district court granted additional time), *Medellin v. Texas* (holding that International Court of Justice decisions are not binding in U.S.) and *Gonzalez v. Carhart* (upholding Partial Birth Abortion Act of 2003).

It is from 2008 to 2010 that Martin and Quinn estimate a decisive shift to the right for Kennedy. Several of Kennedy's conservative votes in that time period do not imply a shift to the right. *McDonald v. Chicago* held that the Second Amendment covered a private right to gun ownership and was supported by more than 300 members of Congress as amici including many moderate members of Congress such as Senators Baucus, Feingold, Snowe and Webb and Representatives DeFazio, Dingell, Giffords and Oberstar. Only 56 members of Congress signed on as amici for the other side. The high profile *Citizens United* case was indeed quite conservative, but was a natural continuation of Kennedy's jurisprudence rather

than a shift to the right; indeed Kennedy voted against the original on *Austin* decision that was overturned by *Citizens United* and joined Scalia's opinion in *FEC v. Wisconsin Right to Life* in 2007 that deemed *Austin* "wrongly decided."

There were also a number of cases on Fourth and Sixth Amendment cases in which Kennedy voted in a conservative direction, often against erstwhile conservatives Scalia and Thomas. They include *Bullcoming v. New Mexico* and *Melendez-Diaz v. Massachusetts* (in both which Kennedy was in the minority arguing that confrontation clause did not require testimony of forensic experts), *Arizona v. Gant* (in which Kennedy was in minority arguing that police could search a vehicle after an arrest even if there was no clear threat to their safety or clear need to preserve evidence) and *Oregon v. Ice* (in which Kennedy, along with Stevens, Breyer and Alito, joined Ginsburg's opinion stating that a judge, not a jury, could find certain facts). On every one of these cases, Kennedy voted with Breyer (and sometimes other liberals). These votes seem to reflect less a shift to the right than the "Farnsworthian" (see page 12) emergence of a new cleavage on the Court.

Of the remaining high profile ideologically charged cases from 2008 to 2010 there is a rough parity between liberal and conservative votes for Kennedy. Cases on which Kennedy supported conservative outcomes include *District Attorney v. Osborne* (finding no post-conviction right to potentially exculpatory DNA evidence) *Connick v. Thompson* (holding against holding prosecutor's office liable for civil rights violations that arose because of poor training), *Ashcroft v. Iqbal* (holding that top government were not liable for alleged discriminatory activity of subordinates), *Herring v. U.S.* (allowing certain good faith exceptions to exclusionary rule), *Salazar v. Buono* (allowing a cross on public park), *Ricci v. New Haven*

(disapproving of New Haven decision to nullify a firefighter’s exam on which whites did better than non-whites), *14 Penn Plaza v. Pyett* (holding that contractual arbitration precluded judicial resolution of discrimination claims), and *FCC v. Fox* (upholding FCC ban on “fleeing expletives”). However, these must be taken against the many cases in which Kennedy wrote or joined liberal opinions including *Graham v. Florida* (holding juveniles cannot be sentenced to life in jail for non-homicide offenses), *Cone v. Bell* and *Harbison v. Bell* (providing rights for death row inmates), *Brown v. Plata* (releasing California prisoners due to overcrowding), *Wyeth v. Levine* (holding drugs companies not shielded from state liability laws due to federal regulation), *Altria v. Good* (holding federal laws do not preempt ability of states to regulate tobacco), *Caperton v. Massey* (holding that a West Virginia judge had to recuse himself from case involving major campaign contributor), *Safford Unified School District v. Redding* (deeming a strip search of a junior high girl unconstitutional - unanimous on central point of case) and *Brown v. Entertainment Merchants Association* (striking California law against selling violent video games to minors).

Public opinion is also consistent with the idea that the Court is not particularly conservative. Gibson (2012, 9) surveyed Americans about the Court in 2011 and found that those were dissatisfied with the Court were equally likely to say the Court was too liberal or too conservative. He summed his findings by saying “there is no consensus in American politics today about the ideological location of the current Supreme Court.” Jesse and Malhotra (2012) polled Americans on specific Supreme Court cases, presenting them summaries of each position and asking which way the Court should have ruled. Of the nine decisions they polled with clear ideological valences (*Comstock*, discussed earlier, was the tenth case they

polled), eight were conservative decisions (*Citizens United*, *Heller*, *Salazar*, *Ricci*, *Crawford*, *Baze*, *Parents Involved*, *Gonzales v. Carhart*) and respondents agreed with the actual decision 71.6 percent of the time. It was the one liberal decision in the survey, *Hamdan*, that had the lowest level of popular support, at only 29.9 percent agreement. Given that the public has not shifted dramatically to the right (Stimson 1999, 2012) then these results are inconsistent with a claim that the Court is at its historic conservative peak.

## 5 Conclusion

Measuring Supreme Court preferences is important for empirical testing and, in turn, for intellectual development in the study of courts and the law. This has led to widespread use of several measures including those produced by Martin and Quinn, the most widely used measures in the field. Most applications use these measures cardinally as the theories being tested are about preference change or “spatial distances” between actors or whether preferences in one institution are to the left or right of those in another institution.

A problem is that it is, as Ho and Quinn (2010, 846) argue, “misguided” to use the Martin and Quinn measures in this way. Theoretically, cardinal use of the Martin and Quinn scores requires a strong and arguably unrealistic assumption about fixed agenda space. Practically, the Martin and Quinn scores produce highly debatable claims that the *Roe* and *Furman* courts were among the most conservative of the post-war era.

This paper presents an alternative approach that directly engages with the issue of changing agendas by updating and expanding on the methods used in Bailey (2007) and Bailey and Maltzman (2008, 2011). It uses bridge observations to link case cutpoint information

over time to produce Supreme Court estimates for justices from 1950 to 2011, including recently appointed Justices Sotomayor and Kagan. The estimates do not suffer from the face validity problems of Martin and Quinn and offer an alternative from going back to the dark ages of ordinal only preference measurement.

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