

# **Authorial Control of the Supreme Court**

Álvaro Bustos

Management School, Pontificia Universidad Católica de Chile

Emerson H. Tiller

Northwestern Pritzker School of Law

## **Abstract**

The Chief Justice of the United States Supreme Court authors many of the most important opinions coming out of the Court. The prestige of authoring an important policy decision, and the value that such an opinion adds to the legacy of the Chief Justice's Court, plays an important and strategic role in the Court's opinion authorship dynamics and the policy outcomes of the Court. We present a Supreme Court decision-making model that, within the confines of legal doctrine, incorporates the authorship utility of the Chief Justice (and senior associate justices who hold secondary, yet important, property rights over authorship). New predictions emerge about who authors the Court's opinion, what case outcome is chosen by the justices, which legal doctrines are chosen, and which decisions are unanimous among the justices. We illustrate aspects of the model with recent Supreme Court decisions involving health care and campaign financing.

## **1. Introduction**

Having authorial control over United States Supreme Court opinions, especially politically salient and consequential opinions, is a prerogative of the Chief Justice of the U.S. Supreme Court when the Chief Justice is part of the decision majority. The Chief Justice's authorship helps to define the Court as "his Court" (e.g., the Roberts Court, the Warren Court, the Rehnquist Court, etc.), adding to the prestige and legacy of that Chief Justice's time in

public service and the institution over which he is supposedly in charge.<sup>1</sup> Similarly, when the Chief Justice is not part of the decision majority, the most senior associate justice of the Court majority has authorial control prerogatives that can produce reputational value for that justice. That the strategic exercise of such authorial control over important Court-defining decisions provides the Chief and senior justice with added utility above the policy impact of the immediate decision itself would surprise few scholars and observers of judicial behavior and the Supreme Court generally.<sup>2</sup> Yet the special conditions of authorship reputation and Court legacy that results from the Chief or senior justice's exercise of authorial control has been elusive in models and theories of Supreme Court decision making, and certainly difficult to quantify empirically.

We address this overlooked yet important feature of Supreme Court decision making with a theory and model of Supreme Court decision making that recognizes the authorial utility that the Chief and senior justices receive in high profile (“salient”) cases,<sup>3</sup> in addition to the utility of achieving their policy preferences in those cases. The implications fascinate. One implication of interest is that the authorial utility of the Chief and senior justices can result in unexpected, ideologically lumpy, voting alignments among the justices in important cases. For example, the Chief Justice may not only join an opposing majority to gain authorship control (and thus weaken the import of that decision), the Chief Justice may very well with his vote constitute the fifth vote establishing the opposing majority to the Chief Justice’s own preferred policy outcome, an outcome difficult to explain under current

---

<sup>1</sup> The “chief justice occupies a singular role, embodying for many Americans the Court that bears his name.” (Greenhouse 2013a:91).

<sup>2</sup> For example, Epstein et al. (2013) refer to one aspect of this authorial utility as “a self-expression component of the judicial utility function” for Supreme Court justices.

<sup>3</sup> Various scholars have attempted to measure case salience in a number of ways, with coverage of a Supreme Court decision on the front page of major newspapers being a common approach. See, Epstein & Segal (2000) Clark et al. (2015).

models of Supreme Court behavior. Our model suggests that we can understand this and other Court dynamics in the context of authorial utility and competition between the Chief Justice and the relevant senior justice over opinion authorship.

We illustrate aspects of our model with stylized presentations of two important Supreme Court cases: *National Federation of Independent Business v. Sebelius*, 567 U.S. 519 (2012), the landmark judicial challenge to the Patient Protection and Affordable Care Act (ACA), commonly called *Obamacare*; and *Williams-Yulee v. Florida Bar*, 575 U.S. \_\_\_\_ (2015), a First Amendment challenge to a state regulation barring judicial election candidates from personally soliciting campaign contributions. In each case, to the surprise of Supreme Court observers, conservative Chief Justice Roberts sided with the liberal wing of the Court as the fifth vote constituting a 5-4 majority (in *NFIB*, upholding *Obamacare* in what was perhaps the most important and partisan divisive case for the Court since *Bush v. Gore*, 531 U.S. 98 (2000), and in *Williams-Yulee*, upholding the Florida State Bar's restriction that judicial candidates could not personally solicit campaign donations). While commentators suggest Chief Justice Roberts's unexpected moves were an effort toward protecting the institutional legitimacy of the Supreme Court and the judiciary more generally, or the logical result of Roberts's judicial philosophy from his previous line of written opinions, insights from our model point to an alternative plausible explanation involving the internal strategic political behavior of the justices – in particular, Chief Justice Roberts's battle with Justice Kennedy to control both the outcome and the opinion authorship of these Court-defining cases. Our analysis is the first attempt in academic literature to provide an authorial explanation for the *Obamacare* and *Williams-Yulee* decisions based on internal strategic considerations of the Court.

Finally, we suggest implications from our model. One set of predictions relates to

changes in the Chief Justice and median justice's voting behavior when the median justice becomes the most senior member of the Court membership (or at least the most senior of those justices to the opposite ideological side of the Chief Justice). Another set of predictions relates to the identification of specific outcomes such as when the Court decisions are made unanimously, or when they are not written by the Chief Justice. A third set of predictions refers to the connection between the legal doctrine that will be used by the Court to make its decision with the distribution of ideological preferences of the justices. Lastly, a set of predictions relate to the move of associate justices towards the median position over time as they become more senior on the Court. These predictions rest on the right of Chief and senior justices to author or assign the Court majority opinion when they are in the majority.

The rest of this article is organized as follows. Section 2 reviews the literature and provides more background for our main ideas. Section 3 introduces the model and presents the main results. Section 4 presents extensions of the model. Section 5 provides stylized examples involving important health care and campaign finance decisions by the Supreme Court. Section 6 concludes.

## **2. Background**

The authorship norm of the Court is that the Chief Justice, if in the voting majority, has the power to draft the majority opinion himself, or assign another member of the majority to draft the opinion (Murphy 1964; Steamer 1986). Similarly, the most senior justice of the Court majority, if the Chief Justice is not part of the majority, has the authority to draft the opinion or assign the responsibility to another member of that majority (Wood 1997). There is a first mover advantage in framing the applicable legal rule as the initial drafter's time and energy in formulating a precedent-setting, high quality draft opinion can make it more

difficult for alternatives to be proposed and accepted by other justices wishing to move the outcome closer to their preferred positions (Lax 2007; Maltzman et al. 2000; Murphy 1964). In addition, the power to assign that authorial right can improve the assigning justice's bargaining power in putting together a majority coalition as he or she may offer the carrot of authorship to a marginal majority coalition member to attain that justice's vote (Maltzman and Wahlbeck 2004). Thus, the Chief or senior justice's prerogative to write or assign the majority opinion is a powerful tool of policymaking.

There is a mature literature on Supreme Court opinion assignment.<sup>4</sup> Some of the scholarship comes from monopoly theories of opinion location, where the median justice of the Court, the majority-median justice, or the non-median opinion author (author-monopolist) controls the policy location of the case outcome.<sup>5</sup> Another wing of the opinion assignment literature views opinion location as an exercise of compromise and bargaining among a number of justices, although with the opinion author heavily influencing the outcome. The focus is more on the game-theoretic considerations of the individual justices than on monopolistic power of the median or majority-median justice.<sup>6</sup>

---

<sup>4</sup> For literature on the strategy and constraints of opinion assignment, see, Maltzman et al. (2000); Slotnick (1979); Danelski (1978); Spaeth (1984); and Davis (1990).

<sup>5</sup> For the Court-median and majority-median models, authorship does not necessarily relate to opinion location as the author would be writing the opinion at the median or majority-median ideal point (median-monopolists), not necessarily at the author's ideal point (Hammond et al. 2005; Carruba et al. 2012). This outcome is induced by the general open rule for offering alternative opinions by any justice of the Court and the effects of the Median Voter Theorem (Black 1948). For the author-monopolist model, authorship is not driven by the opinion location as the author-monopolist writes the opinion at her ideal policy location, or assigns another justice close to the monopolist's ideological position to write the opinion at or near the assignor's ideal policy location. The author-monopolist model works well when there is no open rule norm, so that the Median Voter Theorem does not act efficiently and a median outcome is not automatic.

<sup>6</sup> That scholarship demonstrates that a justice to whom an opinion has been assigned may accrue influence over the case outcome, even under an "open rule" permitting other justices to draft competing alternative opinions (Schwartz 1992; Lax and Cameron 2007). The ultimate impact of an author's opinion is dependent somewhat on the opinion's "precedent" value (Schwartz 1992) or "legal quality" – its persuasiveness, clarity, and craftsmanship (Lax and Cameron 2007). For Schwartz (1992), non-median outcomes are driven by the two exogenously fixed policy alternatives from which the justices must choose, with precedent value being key. By comparison, Lax and Cameron (2007) pose that the drafting of a high quality opinion imposes effort cost on any other justice wanting to offer a competing opinion and allows the assigning justice some leverage in moving

Much of the empirical literature on opinion assignment considers more directly the role of the Chief Justice as the opinion assignor. That literature views the Chief Justice's opinion assignment choice as a combination of policy control, organizational efficiency and collegial fairness (Wahlbeck 2006, Maltzman and Wahlbeck 1996; Maltzman, Spriggs and Wahlbeck 2000; Murphy 1964; Rohde 1972; Rohde and Spaeth 1976), although most of this scholarship focuses on the Chief Justice's policy preferences as the main factor influencing the Chief Justice's opinion assignment, consistent with what is known as the "attitudinal model" of judicial decision making.<sup>7</sup> In that mode, it is a "rational strategy for the assignor ... to assign the opinion to the justice whose views are most like his own ..." (Rohde & Spaeth 1976:174). In addition, some of this research suggests that there is strategic value for the Chief Justice in assigning opinions to a coalition marginal justice (i.e., the justice from the opposing side that is closest to the Chief Justice's preferences) when the case is close such that gaining one more justice from the opposing position through the enticement of opinion authorship could flip the decision in the Chief Justice's favor (Maltzman and Wahlbeck 2005). Presumably, this last tendency is due to the Chief Justice's efforts to maintain a winning coalition and not lose a policy outcome preferable to what might result if the Court majority rested on the other side of the ideological spectrum (Brenner and Spaeth 1986; Maltzman et al., 2000; Maltzman and Wahlbeck 1996).

As noted above, some of the scholarship points to nonstrategic reasons to offer the marginal justice opinion authorship that rest in part on institutional efficiency, public

---

the opinion away from the median of the Court. As Lax and Cameron put it "[t]he need for a majority drives policy toward the median, but the costs of writing opinions allow opinion authors to maintain some control, and so the choice of authors affects policy" (Lax and Cameron 2007: 279).

<sup>7</sup> See Segal & Spaeth (2002:86) ("[T]he Supreme Court decides disputes in light of the facts of the case vis-à-vis the ideological attitudes of the justices."); Epstein & Knight (1998) ("[M]ost justices in most cases pursue policy; that is, they want to move the substantive content of law as close as possible to their preferred position.").

legitimacy, or fairness (Wahlbeck 2006; Benesh et. al. 1999). These reasons on their own, however, would not require the Chief Justice to make authorship assignments to the marginal justice in high-salience cases, as there are enough decisions of lower salience to spread around to meet the goals of institutional efficiency, public legitimacy and ostensible fairness.<sup>8</sup> In short, the Chief Justice enjoys considerable discretion (in terms of institutional efficiency and appearance of public legitimacy) in deciding whether to self-author the majority decision in high-salience cases (including assigning “dogs” – complex, lower saliency cases – to less favored colleagues to balance out the non-policy objectives).<sup>9</sup>

Missing from the opinion literature is the important, and strategic, value of self-authorship - that is, the prestige utility a justice receives from opinion authorship, and, for the Chief Justice, the additional utility in defining "his Court's" legacy through opinion leadership. Our model combines the focus on the chief justice (as with much of the empirical literature) and game-theoretic conditions (as with the strategic decision models) with the added constraint of legal doctrines. Identifying the chief justice's authorial utility – that is, the prestige associated with authoring in important opinion and, for the Chief Justice, the added Court legacy – is the link between the two broader approaches.

---

<sup>8</sup> The justices are well aware of this case assignment strategy of the Chief Justice. Justice Powell, after having been assigned to author two social security cases, once complained that he had been given “two lemons last month” (Wahlbeck 2006:1745).

<sup>9</sup> The senior associate justice who finds herself with opinion assignment control similarly has policy related incentives to self-assign or assign the opinion to a like-minded colleague, or perhaps a marginal voting justice if so needed to attain a majority (Wood 1997). But unlike the Chief Justice, the senior justice does not have the same institutional concerns (efficiency, legitimacy, and fairness), at least not to the same degree as the Chief Justice. This may give the senior justice a bit more latitude to build a coalition and pursue policy gain, although as mentioned before, the Chief Justice has room to move when he is in the majority because of the variance in case salience.

## ***2.1 Authorial Prestige and Court Legacy Utility***

There is much to gain for the Chief Justice in authoring his own majority opinions in significant cases. According to Chief Justice Rehnquist (1987:296), “the office offers no greater reward than the opportunity to author an opinion on an important point of constitutional law.” Indeed, the reputational prestige for any justice, chief or associate, in authoring an important decision would be an attractive inducement for the work required to author the opinion or the sacrifice of one’s marginally preferred vote outcome in a case in order to gain that authorship right. Moreover, few would gainsay the notion that the Chief Justice has a legacy stake in having “his Court” defined in ways consistent with the ideological and jurisprudential reputation that the Chief Justice values. Journalists,<sup>10</sup> prominent academics,<sup>11</sup> notable judges,<sup>12</sup> and others<sup>13</sup> report a lasting perception of a Chief Justice’s tenure – that Chief Justice’s “Court” – of which the Chief Justice is certainly aware. An obvious way to ensure that legacy is to self-assign and author the Court-defining cases of that Chief Justice’s tenure; indeed, such not only would locate policy at the most feasible points near the Chief Justice’s favored positions, but also identify by personal name the most

---

<sup>10</sup> See, for example, “The Legacy of the Warren Court,” *Time Magazine*, July 4, 1969; Stuart Taylor Jr., “Rehnquist’s Court: Tuning Out the White House,” *The New York Times Magazine*, September 11, 1988; Garrett Epps, “There No Liberals on the Roberts Court,” *The Atlantic*, December 1, 2010; Jonathan Gold, “The Burger Court,” *Los Angeles Times*, December 3, 1992.

<sup>11</sup> See, for example, Schwartz (1996) (“The Warren Court: A Retrospective”); Smith et al. (2013) (“The Rehnquist Court and Criminal Justice”); Sunstein and Vermeule (2015:47) (“With respect to questions of executive power, the Roberts Court has been fraught with tensions and conflicts.”); Stone (2012:499) (“To answer that question, we need to step back and do the same thing with the Rehnquist and Roberts Courts that I suggested earlier about the Warren Court.”).

<sup>12</sup> See, for example, Kennedy (2006:1666), (“This is the result, in part, of the way the law school curriculum was designed before it had to change to accommodate the decisions of the Warren Court.”); O’Connor (1990:7) (“The Marshall Court also asserted the federal judiciary’s responsibility to pursue its interpretation of the Constitution in the face of contrary assertions by state legislatures, ...”); Posner (2012:554) (“...[U]nrestrained courts produce unrestrained backlash (so compare the Warren and Roberts Courts)”).

<sup>13</sup> See, for example, “The Roberts Court,” Session at the 2016 Annual Meeting of the State Bar of Wisconsin, June 16, 2017 (<http://amc-archive.wisbar.org/sessions/the-roberts-court/>)(visited June 5, 2017); Burger Court Legacy, C-Span Video, October 3, 1996 (<https://www.c-span.org/video/?77166-1/burger-court-legacy>) (visited on June 5, 2017).



responsible member for that Court's pronouncements – the Chief Justice himself.

Consistent with the legacy incentive, research shows that chief justices disproportionately self-assign opinions in legally salient cases (Brenner 1993; Maltzman & Wahlbeck 2004; Rohde 1972; Slotnick 1978). As Linda Greenhouse (2013a:91) noted, “Ever since John Marshall, who replaced the early practice of seriatim opinions with a single opinion for the Court as the norm, chief justices have been moved to assign themselves the most important cases ...”. The mix of relatively higher and lower salience cases before the Court gives the Chief Justice latitude in self-assignment of important cases. Greenhouse (2013a:95) found that in Chief Justice Roberts's first eight Supreme Court terms there were 101 salient decisions out of a total of 562 cases. With that amount of leeway, a Chief Justice could easily over-assign salient decisions to himself, yet still distribute workload efficiently all the while giving the public appearance of fairness in overall case authorship distribution. Greenhouse's study of Roberts' self-assignments found that Roberts had self-assigned 25 of 89 majority decisions he took part in – that is, 29% of the time – put differently, three times as many salient case self-assignments as compared to the overall justice mean assignments of 9.4% for salient cases. And when Greenhouse considered the 25 most important cases of that period in which Roberts was in the majority, she found that he self-assigned at the rate of 40%. Looking at the Taft Court through the Burger Court, Elliot Slotnick (1978:220) found that the chief justices had over-assigned themselves important cases (self-assigning 24.8% of the time), significantly more than their overall self-assignment ratio of 14.8% for all cases in which the Chief Justice was in the majority. Saul Brenner's study of 437 salient decisions from the early Marshall Court through the Rehnquist Court found that the 13 chief justices had self-assigned salient decisions 35 percent of the time (Brenner 1993). To sum up, over-assigning salient opinions to oneself has been business as usual for chief justices to

control policy outcomes and define their Courts' legacies.

## ***2.2 Doctrinal Frames – Law Still Matters***

Much of the scholarship on opinion assignment considers the decision space on a continuous range of policy choices for the justices. This means that Supreme Court policy and outcomes can be tailored nicely to points on a policy line where simple game theoretic practice can identify the deciding vote and outcome. In reality, the range of options is often discontinuous, in large part due to the nature of law itself (Jacobi & Tiller 2007). Justices work within doctrinal frameworks that condition the decision space. Sometimes the doctrinal frames the justices must choose between are broad and distinct such as constitutional visions of federalism -- that is, state power versus national power.<sup>14</sup> Other doctrinal frames are more narrow or process-oriented, such as interpreting statutes by plain meaning versus legislative intent.<sup>15</sup> And some are more opaque and may overlap, such as strong deference versus weak deference doctrinal regimes in judicial review of administrative agencies.<sup>16</sup> Sometimes the Court is engaged in defining the boundaries of these doctrines to set the preferred range of policy choices; other times the Court is working within these doctrinal frames to achieve ideological policy preferences in a particular case or expected set of cases with similar factual context. In either situation, there are important logic and precedent limitations to choosing outcomes outside the doctrinal ranges or stretching the doctrinal ranges themselves. Indeed, the reality of judicial decisionmaking in an

---

<sup>14</sup> See Baird & Jacobi (2009) (showing that case outcomes based on substantive issues can be reversed in subsequent cases on federal-state power grounds, by initially dissenting justices signaling federalism issues as alternative mechanisms deciding the issue).

<sup>15</sup> See Mullins (2003).

<sup>16</sup> See *Chevron U.S.A. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837 (1984) (strong deference) versus *Skidmore v. Swift & Co.*, 323 U.S. 134 (1944) (weak deference).

environment of “real law” is that the decision space is often hard-partitioned and justices can do only so much to bridge the gaps. Accordingly, a more realistic model of judicial outcomes and opinion assignment should incorporate these legal legitimacy constraints as represented by “doctrines” of law.

To this end, we can visualize the case outcome space through the illustration below. Here we have two competing doctrinal frames under which a decision could be cast. Each doctrine can produce a range of outcomes, as illustrated in Figure 1A. It is common to think about what is the governing law (doctrine) and then how does that law apply to the facts at hand. The Court is commonly put in the position of deciding which doctrinal frame will be applied and become precedent for this type of case now and in the future by lower courts. The competing doctrinal ranges need not be of equal breadth. Consider that one doctrine could come in the form of a rule (perhaps a constitutional federalism rule favoring a states-rights approach) and the other a standard (perhaps a federalism standard that favors national power) (See Figure 1B). The rule might produce a narrow set of outcomes while the standard (such as a “balancing test” or “totality of the circumstances test”) could lead to a broad range of outcomes. And it is certainly plausible (and common) that doctrinal frames overlap (as in Figure 1C). These doctrinal frames, set by legal logic and conventions from shared legal training of lawyers and judges, along with time-honored precedents, map on to the possible policy frontier in a given case (and future cases for the courts below as the doctrine becomes a precedent).

**<<Insert Figure 1 about here>>**

Allowing doctrine to play a central part of a Supreme Court decision changes the analysis from justices deciding which party wins the case – and then how to justify it, or support it, with doctrinal statements lending that case outcome the values of precedent and

legal quality (Cameron and Lax 2007; Schwartz 1992) – to deciding which doctrinal frame should be used for this type of case both now and in the future (Jacobi and Tiller 2007; Cross et al. 2012; Lax 2007; Landa and Lax 2009). It is here where authorial discretion matters most and the justices are very interested in what doctrinal frame is endorsed by the Court. Thus, we can think of the justices as voting on doctrines and, once chosen, it is within a doctrine’s logical confines that the opinion author can emphasize the application and relevance to the current and future cases. The doctrinal selection is of paramount importance for the justices as the doctrinal frame represents the template for application to similar cases that will arise in the lower courts and the measure of whether a lower court’s decision and opinion will be sustained on appeal. This is not to say that the ideological implications of the outcome in the instant case before the Court are not important; rather, the doctrines are chosen generally because they support the ideologically-preferred outcomes like the one in the instant case and similar lower court cases arising in the future (Jacobi and Tiller 2007).

With the foregoing in mind, we next present a model of opinion authorship that emphasizes the opinion prestige and legacy value of authorial control. Adding the authorial prestige and legacy feature to Supreme Court decision making models results in counter-intuitive results and a new set of empirical implications for Supreme Court scholars. The exogenous boundaries set by the doctrinal frames play importantly into the coalition formation and the authorial options for the Chief and senior justices.

### **3. Model of Authorial Prestige and Chief Justice Legacy**

We keep the basic model as simple as possible with severe assumptions about the size of the Court (3 members), discrete doctrinal choices (non-overlapping legal doctrines), and

opinion writing rights falling only on the Chief Justice and the senior justice.<sup>17</sup> We first suppose that the Court has three Justices, the Chief Justice ( $CJ$ ); the senior justice ( $S$ ) and the junior justice ( $J$ ). We denote the ideologies of the justices as  $\{\alpha_{CJ}, \alpha_S, \alpha_J\}$ , which are values in the interval  $[0,1]$ . The closer the ideology is to 1, the more conservative is the justice. Also suppose that the historical moment of the Court is such that there exist *two exogenously given* policy ranges (determined by two competing legal doctrines). The liberal policy range is defined by the interval  $I_L = [\underline{x}_L, \bar{x}_L] \subset [0,1]$  and the conservative policy range is defined by the interval  $I_C = [\underline{x}_C, \bar{x}_C] \subset [0,1]$ . At this point we impose the condition that the doctrinal ranges do not overlap and that they have a similar breadth of application (equal length) such that  $\bar{x}_L < \underline{x}_C$  (that is  $I_L \cap I_C = \emptyset$ ) and  $\bar{x}_C - \underline{x}_C = \bar{x}_L - \underline{x}_L$ .

We denote the decision made by the Court as  $x^* \in I_L \cup I_C$ . Decision  $x^*$  is the result of a set of sequential proposals and decisions (supports) made by the justices in a three period game described by figure 2.

**<<Insert figure 2 about here>>**

During the first period,  $CJ$  proposes opinion  $x_{CJ}^* \in I_L \cup I_C$  or proposes no opinion, we denote this last option as  $x_{CJ}^* = \emptyset$ . During the second period,  $S$  supports  $x_{CJ}^*$  (in case that  $x_{CJ}^* \in I_L \cup I_C$ ) or proposes  $x_S^* \in I_L \cup I_C$ . In order to emphasize the seniority of  $CJ$  over  $S$ , we consider that  $x_{CJ}^*$  and  $x_S^*$  cannot belong to the same policy range. Finally, during the third period  $J$  supports the only proposed opinion or if there are two options,  $x_{CJ}^*$  or  $x_S^*$ , then he

---

<sup>17</sup> Relaxing these assumptions would add complexity in addition to realism, but would not change the most basic insights of the more simplified model we present here.

supports one of them.  $J$  has to choose an opinion and cannot propose a new one.<sup>18</sup> We assume that in case that  $x_{CJ}^* = x_S^*$ , then  $J$  supports  $x_{CJ}^*$ , once more because of seniority.<sup>19</sup>

The decision of the Court is the opinion with majority support (at least two votes) and it is written by the most senior justice in the winning coalition. If the decision has the support of  $CJ$  then he writes it but if the decision does not have the support of  $CJ$  then  $S$  writes it. We call the defeated alternative the minority opinion.

Justices get utility from three sources. First, justice  $i \in \{J, S, CJ\}$  gets utility  $1 - |\alpha_i - x^*|$  which depends on the proximity of his/her ideology to the Court decision. Second, justices  $CJ$  and  $S$  get a reputational utility if they end up writing the Court decision. That is, if  $CJ$  writes the decision then he gets utility  $R > 0$  (where  $R$  utility is a combination of case authorship prestige ( $r$ ) and institutional legacy for the Chief Justice); if  $S$  gets to write the decision then she gets case authorship prestige  $r$ , where  $0 < r < R$ . Third, because each justice has his/her preferred policy range, each justice suffers a penalty  $q$  if he/she does not support an opinion in his/her preferred range. Notice that we do not know whether  $q$  is larger or smaller than  $r$  or  $R$ . Justice  $i \in \{J, S, CJ\}$  preferred range is  $I_L$  if  $|\alpha_i - (\underline{x}_L + \bar{x}_L)/2| < |\alpha_i - (\underline{x}_C + \bar{x}_C)/2|$  otherwise it is  $I_C$ .

In order to simplify the notation we define:

$$L \equiv \bar{x}_C - \underline{x}_C = \bar{x}_L - \underline{x}_L; D \equiv \bar{x}_C + \underline{x}_L = \bar{x}_L + \underline{x}_C$$

and also define:

$$x^* \in (\underline{x}_L, \bar{x}_L) \cup (\underline{x}_C, \bar{x}_C) \equiv \text{interior opinion}$$

$$x^* \in \{\underline{x}_L, \bar{x}_L, \underline{x}_C, \bar{x}_C\} \equiv \text{corner opinion}$$

---

<sup>18</sup>  $J$  always face at least one proposal.

<sup>19</sup> This eliminates the existence of mixed strategy equilibria which makes the analysis much more cumbersome and does not change the substance of our results.

### 3.1 Solution and Main Results

#### 3.1.1 Preliminary Considerations

We characterize the solution for all possible cases. We identify three different scenarios depending on which justice is the moderate (results are symmetric when we swap the two extreme justices for a given moderate justice, hence we only analyze one order for each moderate justice). Scenario I is given by  $\alpha_J < \alpha_S < \alpha_{CJ}$ , scenario II by  $\alpha_J < \alpha_{CJ} < \alpha_S$  and scenario III by  $\alpha_S < \alpha_J < \alpha_{CJ}$ .<sup>20</sup> Figures 3a to 3c show all the possible cases

<<Insert figures 3a-3c about here>>

Before moving forward, notice that it is not necessarily true that all the points in a generic justice  $G$ 's preferred doctrinal range are closer to her own ideology than all the points in  $G$ 's non-preferred range. As figure 4 shows, and lemma 1 formalizes, we identify four possibilities conditional on  $G$ 's ideology  $\alpha$ . If  $\alpha$  is small enough then not only is  $G$ 's preferred range is  $I_L$  but her ideology is closer to any point in  $I_L$  than any point in  $I_C$  ( $G$  strongly prefers  $I_L$ ). However if  $\alpha$  leans towards the left but has an intermediate value then  $G$ 's preferred range still is  $I_L$  but her ideology is closer to a point in  $I_L$  than any point in  $I_C$  *if and only if* the point is sufficiently close to  $\bar{x}_L$  ( $G$  weakly prefers  $I_L$ ). Symmetrically, if  $\alpha$  is large enough then  $G$ 's preferred range is  $I_C$  and her ideology is closer to any point in  $I_C$  than any point in  $I_L$  ( $G$  strongly prefers  $I_C$ ). If  $\alpha$  is intermediate and leans to the right then  $G$ 's preferred range is  $I_C$  and her ideology is closer to a point in  $I_C$  than any point in  $I_L$  *if and only if* the point in  $I_C$  is sufficiently close to  $\underline{x}_C$  ( $G$  weakly prefers  $I_C$ ).

<<Insert figure 4 about here>>

---

<sup>20</sup> Each scenario has 10 possible cases, giving us a total of 30 cases.

This characterization of strong and weak range preferences will simplify the presentation of some of the results of the model.

**Lemma 1 (Strong and weak range preferences):**

- I. ( $I_L$  is strongly preferred): If  $\alpha < \underline{x}_L$  then G's preferred range is  $I_L$  and in addition  $\alpha$  is closer to any point in  $I_L$  than any point in  $I_C$ . That is  $x - \alpha < y - \alpha$ ,  $\forall y \in I_C, \forall x \in I_L$ .
- II. If  $\alpha \in [\bar{x}_L, \underline{x}_C]$  then
  - a. If  $\alpha > \frac{D}{2}$  then G's preferred range is  $I_C$ . In addition,
    - i. ( $I_C$  is weakly preferred): If  $\alpha \in \left[\frac{D}{2}, \min\{\underline{x}_C, \frac{L+D}{2}\}\right]$  then  $\alpha$  is closer to any point in  $[\underline{x}_C, \hat{x}] \subset I_C$  than any point in  $I_L$  in which  $\hat{x}$  is defined by  $\hat{x} - \alpha = \alpha - \bar{x}_L$ . But  $\alpha$  is closer to any point in  $[\tilde{x}, \bar{x}_L] \subset I_L$  than point  $x \in [\hat{x}, \bar{x}_C] \subset I_C$  in which  $\tilde{x}$  is defined by  $x - \alpha = \alpha - \tilde{x}$ .
    - ii. ( $I_C$  is strongly preferred): If  $\alpha \in \left[\min\{\underline{x}_C, \frac{L+D}{2}\}, \underline{x}_C\right]$  then  $\alpha$  is closer to any point in  $I_C$  than any point in  $I_L$ . That is  $\alpha - x > \alpha - y$ ,  $\forall y \in I_C, \forall x \in I_L$ .
  - b. If  $\alpha < \frac{D}{2}$  then G's preferred range is  $I_L$ . In addition,
    - i. ( $I_L$  is weakly preferred): If  $\alpha \in \left[\max\{\bar{x}_L, \frac{D-L}{2}\}, \frac{D}{2}\right]$  then  $\alpha$  is closer to any point in  $[\hat{x}, \bar{x}_L] \subset I_L$  than any point in  $I_C$  in which  $\hat{x}$  is defined by  $\underline{x}_C - \alpha = \alpha - \hat{x}$ . But  $\alpha$  is closer to any point in  $[\underline{x}_C, \tilde{x}] \subset I_C$  than point  $x \in [\underline{x}_L, \hat{x}] \subset I_L$  in which  $\tilde{x}$  is defined by  $\alpha - x = \tilde{x} - \alpha$ .
    - ii. ( $I_L$  is strongly preferred): If  $\alpha \in \left[\bar{x}_L, \max\{\bar{x}_L, \frac{D-L}{2}\}\right]$  then  $\alpha$  is closer to any point in  $I_L$  than any point in  $I_C$ . That is  $\alpha - x > \alpha - y$ ,  $\forall y \in I_C, \forall x \in I_L$ .
- III. ( $I_C$  is strongly preferred): If  $\alpha > \bar{x}_C$  then G's preferred range is  $I_C$  and in addition  $\alpha$  is closer to any point in  $I_C$  than any point in  $I_L$ . That is  $\alpha - x > \alpha - y$ ,  $\forall y \in I_C, \forall x \in I_L$ .

**Proof:** See the Appendix.

### 3.1.2 Solution

As a way to familiarize the reader with the type of analysis we do to solve the problems faced here, we next present the solution of a particular case: case 2 in scenario I.

Using backwards induction, we identify 4 potential paths for the game:



Path 1: At  $t = 3$ ,  $J$  faces that  $CJ$  proposed  $x_{CJ}^* \in I_C$  at  $t=1$  and  $S$  supported it at  $t = 2$ .

Path 2: At  $t = 3$ ,  $J$  faces that  $CJ$  proposed  $x_{CJ}^* \in I_C$  at  $t=1$  and  $S$  does not support it at  $t = 2$ . Instead  $S$  proposes  $x_S^* \in I_L$ .

Path 3: At  $t = 3$ ,  $J$  faces that  $CJ$  proposed  $x_{CJ}^* \in I_L$  at  $t=1$  and  $S$  supported it at  $t = 2$ .

Path 4: At  $t = 3$ ,  $J$  faces that  $CJ$  proposed  $x_{CJ}^* \in I_L$  at  $t=1$  and  $S$  does not support it at  $t = 2$ . Instead proposes  $x_S^* \in I_C$ .

While paths 1 and 3 define unique sequence of events, paths 2 and 4 define two sub-paths with different events and pay-offs. Table Ex1 summarizes these possibilities only when  $J$ 's preferred range is  $I_C$  ( $\alpha_J > \frac{D}{2}$ ); evidently  $S$ 's and  $CJ$ 's preferred range always is  $I_C$ .

<<Insert Table Ex1 about here>>

First we write the solution, then we explain why that is the case:

<<Insert Table Ex2 about here>>

The maximum pay-off that  $CJ$  can obtain is  $U_{CJ} = 1 - (\alpha_{CJ} - \bar{x}_C) + R$ . This payment takes place when  $CJ$  proposes an opinion within its preferred range (avoids  $q$ ), he writes the opinion (gets  $R$ ) and the opinion is written at his best possible location (which is  $\bar{x}_C$ ). This optimal payment takes place in path 1 and sometimes in path 2 when  $J$  supports  $CJ$ 's proposal. Hence, for  $CJ$  to get its optimal payment it has to be that  $x_{CJ}^* \in I_C$ . Because of that, now we only focus on paths 1 and 2. For  $S$  to support  $x_{CJ}^* = \bar{x}_C$  it has to be that  $U_S = 1 - (\alpha_S - \bar{x}_C)$  is larger than  $U_S = 1 - (\alpha_S - \bar{x}_L) + r - q$  and larger than  $U_S = 1 -$

$(\alpha_S - x_{CJ}^*) - q$ .<sup>21</sup> Evidently, it is always true that  $1 - (\alpha_S - \bar{x}_C) > 1 - (\alpha_S - x_{CJ}^*) - q$  and the condition  $1 - (\alpha_S - \bar{x}_C) > 1 - (\alpha_S - \bar{x}_L) + r - q$  hold if and only if  $r < \bar{x}_C - \bar{x}_L + q$ . It follows that the first row in Table Ex2 corresponds to path 1 when  $x_{CJ}^* = \bar{x}_C$ .

If  $r > \bar{x}_C - \bar{x}_L + q$  then  $S$  could be tempted not to support  $x_{CJ}^* \in I_C$  and instead propose  $x_S^* = \bar{x}_L$  but that will be the case only if  $J$  supports  $S$ . From path 2, we know that  $J$  does not support  $S$ , but instead supports  $CJ$  when  $U_J = 1 - (x_{CJ}^* - \alpha_J) > 1 - (\alpha_J - \bar{x}_L) - q$  or equivalently when  $\alpha_J > \frac{x_{CJ}^* + \bar{x}_L}{2} - \frac{q}{2}$ . Hence, if  $\alpha_J > \frac{\bar{x}_C + \bar{x}_L}{2} - \frac{q}{2}$ , then  $CJ$  is better to propose  $x_{CJ}^* = \bar{x}_C$  once more. Notice that in this case,  $S$  knows that  $J$  will support  $CJ$  and  $S$  will get  $U_S = 1 - (\alpha_S - x_{CJ}^*) - q$ , which is smaller than the utility that  $S$  gets if he supports  $CJ$  from the beginning. It follows that the second row in Table Ex2 also corresponds to path 1 when  $x_{CJ}^* = \bar{x}_C$ .  $CJ$  cannot propose  $x_{CJ}^* = \bar{x}_C$  anymore when  $\alpha_J < \frac{x_{CJ}^* + \bar{x}_L}{2} - \frac{q}{2}$  because in that case,  $J$  will support a hypothetical  $x_S^* = \bar{x}_L$  and  $U_{CJ} = 1 - (\alpha_{CJ} - \bar{x}_L)$ . This last utility is smaller than the utility  $U_{CJ} = 1 - (\alpha_{CJ} - x_{CJ}^*) + R$  that  $CJ$  gets in the other hypothetical situation in which he proposes  $x_{CJ}^* \in I_C$  and at least one other justice supports it. The solution is that  $CJ$  proposes the opinion that makes  $J$  exactly indifferent (and hence supports it) to a hypothetical proposal of  $x_S^* = \bar{x}_L$  which is  $x_{CJ}^* = 2\alpha_J + q - \bar{x}_L$ . Once more  $S$  prefers to accept  $x_{CJ}^* = 2\alpha_J + q - \bar{x}_L$  than propose  $x_S^* = \bar{x}_L$  because in the first case he gets  $U_S = 1 - (\alpha_S - x_{CJ}^*)$  and not  $U_S = 1 - (\alpha_S - x_{CJ}^*) - q$ . Hence the third row in table Ex2 is path 1 as well.

---

<sup>21</sup> In this two hypothetical scenarios, the opinion would end in  $I_L$ .

Finally, if  $\alpha_J < \frac{x_C + \bar{x}_L}{2} - \frac{q}{2}$  then not even the proposal  $x_{CJ}^* = \underline{x}_C$  will convince  $J$  not to support  $x_S^* = \bar{x}_L$  and in this case  $CJ$  gets utility  $U_{CJ} = 1 - (\alpha_{CJ} - \bar{x}_L)$ . But it is easy to verify that both in paths 3 and 4,  $CJ$  can get utility  $U_{CJ} = 1 - (\alpha_{CJ} - \bar{x}_L) + R - q > 1 - (\alpha_{CJ} - \bar{x}_L)$  if he proposes  $x_{CJ}^* = \bar{x}_L$  ( $R - q > 0$  due to Condition 1,  $r - q > \bar{x}_C - \bar{x}_L$ ). Hence, we now only focus on paths 3 and 4. The solution follows directly after we notice that if  $x_{CJ}^* = \bar{x}_L$  and  $x_S^* \in I_C$ , then  $J$  always prefer to support  $CJ$  rather than  $S$  because in the case of supporting  $CJ$ ,  $J$  gets  $U_J = 1 - (\alpha_J - \bar{x}_L) - q$  and, in the case of supporting  $S$ , he gets  $U_J = 1 - (x_S^* - \alpha_J)$ . We know that  $U_J = 1 - (\alpha_J - \bar{x}_L) - q > 1 - (x_S^* - \alpha_J)$  because  $\alpha_J < \frac{x_C + \bar{x}_L}{2} - \frac{q}{2}$  and  $x_S^* \in [\underline{x}_C, \bar{x}_C]$ . Hence,  $CJ$  proposes  $x_{CJ}^* = \bar{x}_L$  and  $S$ , knowing that  $J$  will support it, proposes  $x_S^* \in I_C$  only with the purpose to avoid  $q$ . From there, row 4 in Table Ex2 fits within path 4 in Table Ex1.

Proposition 1 summarizes the solution of the game played by the justices in all possible cases defined by scenarios I-III. As we show in its proof (see the Appendix) we notice that there are only three types of equilibria that we call E1, E2 and E3 which are defined as follows:

E1:  $CJ$  proposes an opinion in his preferred doctrinal range. At least one additional justice (maybe both) support  $CJ$  proposal.  $CJ$  writes the majority opinion.

E2:  $CJ$  proposes an opinion in his non-preferred doctrinal range. At least one additional justice (maybe both) support  $CJ$  proposal.  $CJ$  writes the majority opinion.

E3:  $CJ$  is indifferent between proposing an opinion in his preferred doctrinal range or not proposing an opinion at all.  $S$  does not support  $CJ$  opinion and instead proposes an opinion in  $CJ$  non-preferred range.  $J$  supports  $S$  proposal and  $S$  writes the majority opinion.

**Proposition 1 (Characterization of E1, E2 and E3 equilibria):**

1. *Equilibrium E1 (CJ writes the majority opinion in his preferred range) takes place only in the following situations:*
  - a. *All justices preferred (weakly or strongly) doctrinal range is the same.*
  - b. *CJ's and S's preferred (weakly or strongly) doctrinal range is the same but J's preferred (weakly or strongly) range is CJ's non-preferred range. In addition S's utility from writing the opinion is small enough (which means  $r - q < \bar{x}_C - \bar{x}_L$  or  $r - q < \underline{x}_C - \bar{x}_L$  when S or CJ is the median respectively).*
  - c. *CJ's and J's preferred (weakly or strongly) doctrinal range is the same but S's preferred (weakly or strongly) range is CJ's non-preferred range.*
2. *Equilibrium E2 (CJ writes the majority opinion in his non-preferred range) takes place only in the following situations:*
  - a. *CJ's and S's preferred (weakly or strongly) doctrinal range is the same but J's preferred (weakly or strongly) range is CJ's non-preferred range. In addition S's utility from writing the opinion is large enough (which means  $r - q > \bar{x}_C - \bar{x}_L$  or  $r - q > \underline{x}_C - \bar{x}_L$  when S or CJ is the median respectively).*
  - b. *J's and S's preferred (weakly or strongly) range is CJ's non-preferred range. In addition CJ's utility from writing the opinion is large enough (which means  $R - q > 0$  or  $R - q > \underline{x}_L - \bar{x}_L$  when S is the median and  $R - q > 0$  or  $R - q > \underline{x}_C - \bar{x}_C$  when J is the median).*
3. *Equilibrium E3 (S writes the majority opinion) takes place only in the following situation: J's and S's preferred (weakly or strongly) range is CJ's non-preferred range. In addition CJ's utility from writing the opinion is small enough (which means  $R - q < 0$  when S is the median and  $R - q < \underline{x}_C - \bar{x}_C$  when J is the median).*

**Proof:** See the Appendix.

Tables 1a-1c summarize all the equilibria for all the possible scenarios according to the preferences of the justices (64) and values of the parameters of the model (total of 96).

**<<Insert Tables 1a-1c about here>>**

While in the Appendix we describe the solution extensively (we solve every single case distinguishing between strong and weak range preferences when necessary), here we merely explain the intuition behind it.

Equilibrium E1 takes place in three types of situations. First, it takes place when the three justices weakly or strongly prefer the same range.<sup>22</sup> In those situations, the three justices support the same opinion which at the end is written by  $CJ$ . If  $J$  strongly prefers  $CJ$ 's preferred range then  $CJ$  can propose his optimum opinion (regardless of whether  $CJ$ 's preferences for the range are strong or weak) and  $S$  has no other alternative but to support it. If  $J$  only weakly prefers  $CJ$ 's preferred range then the doubt is whether  $S$  could propose an opinion that will attract the support of  $J$ . But if  $CJ$  also has weak preferences then at the first period he proposes  $x_{CJ}^* = \bar{x}_L$  (in case the preferred range is  $I_L$ ) or  $x_{CJ}^* = \underline{x}_C$  (in case the preferred range is  $I_C$ ) which is preferred by  $J$  to any opinion in the alternative range. On the other side, if  $CJ$  has strong preferences and  $r$  is small enough ( $S$  does not prefer to propose an opinion in the alternative range) then  $CJ$  can propose his optimum  $x_{CJ}^* = \underline{x}_L$  (in case the preferred range is  $I_L$ ) or  $x_{CJ}^* = \bar{x}_C$  (in case the preferred range is  $I_C$ ) which both  $S$  and  $J$  support. Instead if  $CJ$  has strong preferences and  $r$  is large enough ( $S$  could prefer to propose an opinion in the alternative range) then  $CJ$  proposes an opinion *inside* his preferred range that makes  $J$  indifferent with the opinion that  $S$  could offer at the second period in the alternative range and

---

<sup>22</sup> That covers cases 1 and 10 for the three scenarios. In addition cases 2 and 3 (for all scenarios) when the liberal justice leans enough to the right. Case 4 (in all scenarios) when the liberal justice leans enough to the right or the conservative justice leans enough to the left. Cases 7 and 9 (in all scenarios) when the conservative justice leans enough to the left. In cases 5, 6 and 8 (in all scenarios) it is not feasible that all justices weakly or strongly prefer the same range.

ergo both  $J$  and  $S$  support it. For example, if  $\alpha_{CJ} < \underline{x}_L < \bar{x}_L < \frac{D-L}{2} + \frac{q}{2} < \alpha_J < \alpha_S < \frac{D}{2}$  then  $CJ$  cannot just propose  $x_{CJ}^* = \underline{x}_L$  as he would like because in that case  $S$  proposes  $x_S^* = \underline{x}_C$  which is preferred by  $J$  as  $1 - (\underline{x}_C - \alpha_J) - q > 1 - (\alpha_J - \underline{x}_L)$  and it is preferred by  $S$  as  $1 - (\underline{x}_C - \alpha_S) + r - q > 1 - (\alpha_S - \underline{x}_L)$ .<sup>23</sup> Instead  $CJ$  proposes  $x_{CJ}^* = 2\alpha_J - \underline{x}_C - q \in [\underline{x}_L, \bar{x}_L]$  which makes  $J$  indifferent in case that  $S$  proposes  $x_S^* = \underline{x}_C$  and ergo  $CJ$  gets the required support to write the Court decision.<sup>24</sup> Hence,  $CJ$  writes a majority opinion in his preferred range when the three justices have the same preferred range. And that opinion can be a corner or an interior point.

Equilibrium E1 also takes place when  $S$ 's and  $CJ$ 's preferred (weakly or strongly) range is the same,  $J$  strongly or weakly prefer  $CJ$ 's non-preferred range and  $S$ 's reputational benefit ( $r$ ) is not large.<sup>25</sup> That is, even when  $J$  would prefer to support a proposal made by  $S$  in  $CJ$ 's non-preferred range, at the end  $S$  does not make that proposal and  $J$  ends supporting the proposal made by  $CJ$ . Given that  $J$ 's preferred range is  $CJ$ 's non-preferred range, the only situation in which equilibrium E1 might not take place is when  $S$  has enough incentives to propose her own preferred opinion that will be supported by  $J$ . However, given that  $S$ 's preferred range is also  $CJ$ 's preferred range, it has to be that the opinion writer utility  $r$  is large enough to compensate for voting outside her preferred range ( $-q$ ) and a potential larger

---

<sup>23</sup> We know that holds because it is equivalent to  $\alpha_S > \frac{D-L}{2} - \frac{r-q}{2}$  which it is true given that  $\frac{D-L}{2} + \frac{q}{2} < \alpha_J < \alpha_S$ .

<sup>24</sup> If  $CJ$  offers  $x_{CJ}^* = 2\alpha_S - \underline{x}_C + r - q \in [\underline{x}_L, \bar{x}_L]$  then he makes  $S$  indifferent and ergo also gets to write the Court decision but as  $2\alpha_J - \underline{x}_C - q < 2\alpha_S - \underline{x}_C + r - q$  then  $CJ$  prefers the first alternative (make  $J$  indifferent).

<sup>25</sup> For all scenarios, E1b is not feasible in cases 1, 8, 9 and 10. Instead E1b takes place in scenario I for the next cases: case 2 when  $J$  is far enough to the left and  $r$  is small enough; cases 3 and 4 when  $S$  is far enough to the right,  $J$  is far enough to the left and  $r$  is small enough; in case 5 when  $r$  is small enough and in cases 6 and 7 when  $S$  is far enough to the right and  $r$  is small enough. Also E1b takes place in scenario II for the next cases: case 2 when  $J$  is far enough to the left and  $r$  is small enough; cases 3 and 4 when  $CJ$  is far enough to the right,  $J$  is far enough to the left and  $r$  is small enough; in case 5 when  $r$  is small enough and in cases 6 and 7 when  $CJ$  is far enough to the right and  $r$  is small enough. Finally, E1b never takes place in scenario III because ideologically  $J$  is always located between  $CJ$  and  $S$ .

distance of  $S$  ideology to the Court decision. As it was in the case of E1a, under E1b, the proposed opinion can either be a corner or an interior solution. An example in which E1b defines an interior solution takes place in case 3 of scenario I when  $\bar{x}_L < \alpha_J < \frac{D}{2} < \alpha_S < \underline{x}_C < \bar{x}_C < \alpha_{CJ}$  and  $r - q \in [2\alpha_S - (\bar{x}_L + \underline{x}_C), 2\alpha_S - (\bar{x}_L + \bar{x}_C)]$ . Then,  $CJ$  offers  $x_{CJ}^* = 2\alpha_S - \bar{x}_L - (r - q) \in [\underline{x}_C, \bar{x}_C]$  which matches the best proposal that  $S$  can make to attract  $J$ 's support. As we know that in case of indifference  $J$  supports the most senior justice,  $CJ$  ends writing the decision of the Court.

As a third option, equilibrium E1 also takes place when  $CJ$ 's and  $J$ 's preferred range is the same but  $S$ 's preferred range is the alternative range.<sup>26</sup> In that case,  $S$  proposes an alternative opinion to  $CJ$ 's proposal (in that way she avoids disutility  $q$ ) but  $J$  supports  $CJ$ . It is clear that when  $J$  strongly prefers  $CJ$ 's preferred range then  $CJ$  proposes his optimum opinion which becomes the Court decision. But if  $J$  only weakly supports  $CJ$ 's preferred range then  $CJ$  might end up proposing an interior opinion in his preferred range when  $r$  is large enough.<sup>27</sup>

The bottom line of all these E1 equilibria variations is that regardless of whether  $CJ$  has both  $S$  and  $J$  support, or only support from one of them, the outcome is that the Court decision is written by  $CJ$  and that it is an opinion within  $CJ$ 's preferred doctrinal range.

**<<Insert Table 2 about here>>**

---

<sup>26</sup> In scenario I, E1c never takes place because, ideologically speaking,  $S$  is between  $CJ$  and  $J$ . In scenario II (III), E1c only takes place in cases 3 and 6 when  $CJ$  ( $J$ ) is enough to the left, in cases 4 and 7 when  $CJ$  ( $J$ ) is enough to the left and  $S$  enough to the right. Always in case 8 and in case 9 when  $S$  is enough to the right.

<sup>27</sup> For more details see Result 5 in the next subsection.

By far, E1 is the most common of the three type of equilibria — according to table 2, 50% of the cases have equilibrium E1. The next most frequent equilibrium is E2 — according to table 2, 33% of the cases have equilibrium E2.<sup>28</sup> Equilibrium E2 takes place in two type of situations. First *CJ* proposes an opinion outside his preferred range and that opinion becomes the Court decision when *S*'s and *CJ*'s preferred (weakly or strongly) range is the same, *J* strongly or weakly prefer *CJ*'s non-preferred range and *S*'s reputational benefit is large (the complement of E1b relative to the value of the reputational value).<sup>29</sup> *CJ* knows that if he does not propose an opinion in his non-preferred range then *S* will do it and attract *J* support. *S* would make that offer because *r* is large enough and *CJ* anticipates that because *R* is larger than *r*.

Equilibrium E2 also takes place in the situation in which *J*'s and *S*'s preferred (weakly or strongly) doctrinal range is *CJ*'s non-preferred range.<sup>30</sup> In addition *CJ*'s utility from writing the opinion is large enough such that he will propose an opinion in his non-preferred range which will be supported by the other two justices.<sup>31</sup>

Evidently equilibrium E3 only takes place in one situation which is the complement of equilibrium E2b relative to the value of *R*. That is, *J*'s and *S*'s preferred (weakly or strongly)

---

<sup>28</sup> Hence the other 17% of the cases correspond to equilibrium E3.

<sup>29</sup> For all scenarios, E2a is not feasible in cases 1, 8, 9 and 10. Instead E2a takes place in scenario I for the next cases: case 2 when *J* is far enough to the left and *r* is large enough; cases 3 and 4 when *S* is far enough to the right, *J* is far enough to the left and *r* is large enough; in case 5 when *r* is large enough and in cases 6 and 7 when *S* is far enough to the right and *r* is large enough. Also E2a takes place in scenario II for the next cases: case 2 when *J* is far enough to the left and *r* is large enough; cases 3 and 4 when *CJ* is far enough to the right, *J* is far enough to the left and *r* is large enough; in case 5 when *r* is large enough and in cases 6 and 7 when *CJ* is far enough to the right and *r* is large enough. Finally, E2a never takes place in scenario III because ideologically *J* is always located between *CJ* and *S*.

<sup>30</sup> With that we cover the Universe of possible cases.

<sup>31</sup> Equilibrium E2b takes place if and only if *R* is large enough and, for scenario I in: cases 3 and 6 when *S* is enough to the left, in cases 4 and 7 when *S* is enough to the left and *CJ* is enough to the right. Always in case 8 and only when *CJ* is enough to the right in case 9; and for scenario III in: case 2 when *CJ* is enough to the left, in cases 3 and 4 when *CJ* is enough to the left and *J* is enough to the right, always in case 5, in cases 6 and 7 when *J* is enough to the right. For all the other possibilities E2b is not feasible.



range is  $CJ$ 's non-preferred range and in addition,  $CJ$ 's utility from writing the opinion is not large enough to convince him to propose an opinion in his non-preferred range.<sup>32</sup> For example if  $\bar{x}_L < \alpha_J < \alpha_S < \frac{D}{2} < \alpha_{CJ} < \underline{x}_C$  and  $R - q < 0$  then  $CJ$  knows that if he proposes  $x_{CJ}^* = \underline{x}_C$  then  $S$  proposes  $x_S^* = \bar{x}_L$  which is both preferred by  $J$  and  $S$ .  $CJ$  could get to write the opinion if he himself proposes  $x_{CJ}^* = \bar{x}_L$  but because his reputational utility is not large enough to compensate for the disutility he suffers if he supports an opinion in his non-preferred range, he prefers to either propose an opinion in his preferred range or not propose an opinion at all. Hence,  $S$  proposes his optimal opinion which is supported by  $J$ . That is, unlike in equilibria E1 and E2, now  $S$  gets to write the Court decision.<sup>33</sup>

### 3.1.3 Main Results

Proposition 1 allows us to derive several results. Next we discuss the most relevant.

**Result 1 (When  $S$  never writes the majority opinion):**  *$S$  never writes the Court opinion when  $CJ$  is the median of the Court or when  $R$  is larger than  $q$ .*

$S$  writes the Court opinion only under equilibrium E3. A requisite for that equilibrium to take place is that  $S$  and  $J$  have the same preferred range which is  $CJ$ 's non-preferred range. However, that order of the justices' ideologies is not feasible if  $CJ$  has an ideology in between the ideologies of  $S$  and  $J$  because the only way in which  $S$  and  $J$  share the same preferred range is that  $CJ$  shares it as well and that implies that we are in equilibrium E1a and not E3.

---

<sup>32</sup> Equilibrium E3 takes place if and only if  $R$  is small enough and, for scenario I in: cases 3 and 6 when  $S$  is enough to the left, in cases 4 and 7 when  $S$  is enough to the left and  $CJ$  is enough to the right. Always in case 8 and only when  $CJ$  is enough to the right in case 9; and for scenario III in: case 2 when  $CJ$  is enough to the left, in cases 3 and 4 when  $CJ$  is enough to the left and  $J$  is enough to the right, always in case 5, in cases 6 and 7 when  $J$  is enough to the right. For all the other possibilities E3 is not feasible.

<sup>33</sup> Whenever in Tables 1a-1c there is an E3 equilibrium,  $CJ$  should be indifferent between proposing an opinion or not. Only because of shortage of space we do not write the  $\emptyset$  alternative.

Another requisite for equilibrium E3 to take place is that the reputational utility that *CJ* gets from writing the opinion will not be large enough to compensate the loss suffered by *CJ* if he hypothetically supported an opinion inside his non-preferred range. Hence, when  $R$  is large enough (or alternatively,  $q$  is small enough), *S* never writes the Court opinion.

**Result 2 (If *CJ* writes the opinion in his non-preferred range):** *If *CJ* writes the Court opinion in his non-preferred range then that opinion always ends in *S*'s non-preferred range if *CJ* is the median of the Court, but the opinion always ends in *S*'s preferred range if *J* is the median of the Court.*

Equilibrium E2 refers to situations in which *CJ* writes the Court opinion in his non-preferred range. In addition, we know that when *CJ* is the median of the Court then E2b is not feasible, that is equilibrium E2 happens in scenarios in which *S*'s and *CJ*'s preferred ranges are the same. It follows that if *CJ* writes the Court decision in his non-preferred range that range also is *S*'s non-preferred range. Analogously, we know that when *J* is the median of the Court then E2a is not feasible, that is equilibrium E2 happens in scenarios in which *S*'s and *J*'s preferred ranges are the same which is *CJ*'s non-preferred range. It follows that if *CJ* writes the Court decision in his non-preferred range that range also is *S*'s preferred range.

**Result 3 (Unanimous decision):** *The Court decides with unanimous decision either when all the justices have the same preferred range, when only *S*'s and *CJ*'s preferred range is the same and *S*'s utility from writing the majority opinion is small enough, or when only *S*'s and *J*'s preferred range is the same and *CJ*'s utility from writing the majority opinion is large enough.*

Unanimous decisions take place when  $S$  does not prefer to propose an alternative opinion. That happens under equilibria E1a, E1b or E2b. Under all the other possible equilibria (E1c, E2a or E3), either  $CJ$  proposes an opinion in  $S$ 's non-preferred range, which  $S$  does not support but  $J$  does; or  $CJ$  does not support the Court decision finally written by  $S$ .

**Result 4 (Support to CJ):** *When  $S$  ( $J$ ) is the median and  $CJ$  writes the Court decision in his preferred range then he always does it with the support of  $S$  ( $J$ ). But when  $CJ$  is the median of the Court then  $CJ$  might write the Court decision with the support of any of the other justices (separately or together).*

Equilibrium E1c (E1b) never takes place when  $S$  ( $J$ ) is the median. That is, if  $CJ$  writes the majority opinion in his preferred range and  $CJ$  is the median of the Court then it is possible that  $CJ$  writes the majority opinion in his preferred range only with the support of  $J$ , only with the support of  $S$  or with the support of both (when  $CJ$  is the median then all E1 equilibria are possible) but when  $S$  or  $J$  are median of the Court,  $CJ$  can only write the majority opinion in his preferred range if he has the support of  $S$  or  $J$  respectively.

**Result 5 (CJ proposes and writes an interior opinion):**  *$CJ$  writes an interior Court decision when  $r - q$  is large enough and in addition any of the following conditions hold: 1)  $S$  weakly prefers  $CJ$ 's preferred range,  $S$ 's optimum opinion is not the same as  $CJ$ 's optimum opinion within  $CJ$  preferred range and if  $J$ 's preferred range is  $CJ$ 's preferred range then their optimum opinion is not the same; or 2)  $J$  weakly prefers  $CJ$ 's preferred range and  $J$ 's optimum opinion is not the same as  $CJ$ 's optimum opinion within  $CJ$  preferred range; or 3)  $S$ 's and*

*CJ's preferred range is the same and different from J's preferred range and S's optimum opinion is not the same as CJ's optimum opinion.*<sup>34</sup>

The logic behind Result 5 is that whenever *CJ* is in a situation in which either *S* or *J* weakly prefer the same range as *CJ*, but *S*'s or *J*'s optimal opinions are not the same as the optimal opinion for *CJ* then *CJ* will propose an opinion that although it is not his optimum, will convince *S* not to offer an alternative opinion that would gather *J*'s support and leave *CJ* worse off. The weak support has to be over *CJ*'s preferred range otherwise the interior opinion will not be incentive enough to change the decision of the justice tempted to support an opinion in the alternative range.

For example, under scenario I (*S* is the median) if  $\bar{x}_L < \alpha_J < \frac{D}{2} < \alpha_S < \underline{x}_C < \bar{x}_C < \alpha_{CJ}$  and  $r - q \in [2\alpha_S - (\bar{x}_L + \bar{x}_C), 2\alpha_S - (\bar{x}_L + \underline{x}_C)]$  then *CJ* knows that if he proposes  $x_{CJ}^* = \bar{x}_C$  then *S* proposes  $x_S^* = \bar{x}_L$  which is both preferred by *J* and *S*.<sup>35</sup> Hence *CJ* offers an opinion that makes *S* indifferent (*S* is the one that weakly prefers  $I_C$ , *J* prefers  $I_L$ ) which is defined by  $r - q + 1 - (\alpha_S - \bar{x}_L) = 1 - (x_{CJ}^* - \alpha_S)$  or  $x_{CJ}^* = 2\alpha_S - \bar{x}_L - (r - q)$ . Result 5 does not hold under cases 1, 4 or 10 because over these all the justices have the same optima inside the ranges. In addition, Result 5 does not hold under cases 5, 8 and 9 because over these neither *J* nor *S* have a weakly preferred range, and Result 5 does not hold under case 7 either because although *S* could weakly prefer *CJ*'s preferred range, their optimum is the same. Result 5 might only work under cases 2, 3 and 6.

---

<sup>34</sup> In scenario I: *CJ* is capturing *J*'s vote: Subcases 2.3 & 3.2. *CJ* is capturing *S*'s vote: Subcases 3.2 & 3.4 & 6.2. In scenario II: *CJ* is capturing *J*'s vote: Subcases 2.3. *CJ* is capturing *S*'s vote: Subcases 3.4 & 6.3. In scenario III: *CJ* is capturing *J*'s vote: Subcases 6.2 & 7.3.

<sup>35</sup> *S* prefers  $\bar{x}_L$  than  $\bar{x}_C$  because under the first one she gets  $r - q + 1 - (\alpha_S - \bar{x}_L)$  which is larger than  $1 - (\bar{x}_C - \alpha_S)$  as  $r - q > 2\alpha_S - (\bar{x}_L + \bar{x}_C)$ .

In addition, Result 5 also holds when  $CJ$  and  $S$  prefer the same range but have opposed optima and in addition  $J$ 's preferred range is not the same. This time,  $CJ$  strategy is to convince  $S$  not to propose an opinion in  $J$ 's preferred range. In scenario II Result 5 can be found only in subcases of 2, 3 and 6. The result does not hold under cases 1, 4 or 10 because over these all the justices have the same optima inside the ranges. In addition, Result 5 does not hold under cases 8 and 9 because over these the preferred ranges of  $J$  and  $CJ$  are the same and Result 5 does not hold under cases 5 and 7 either because  $S$ 's and  $CJ$ 's optima are the same.

Finally, there are three subcases (6.2, 7.3 and 7.4) that satisfy Result 5 when  $J$  is the median and all correspond to the situation in which  $J$  weakly prefers  $CJ$ 's preferred range and  $J$ 's optimum opinion is not the same as  $CJ$ 's optimum opinion. Notice that now case 2 does not define an interior solution because  $J$  and  $S$  strongly prefer  $I_C$ . Case 3 does not satisfy result 5 either because  $S$  strongly prefer  $I_C$  and if  $CJ$  and  $J$  have the same preferred range they also share the same optimum.<sup>36</sup>

**Result 6 (S proposes and writes an interior opinion):** *S writes an interior Court decision only under the following conditions: J is the median of the Court; J's weakly preferred and S's preferred range is the same and not the same as CJ's preferred range; J's and S's optimum opinion is not the same; and the utility that CJ obtains for writing the opinion is small enough.*

Result 6 states that  $S$  not only might write a Court decision as characterized by E3 in proposition 1 but in addition sometimes  $S$  could also write an interior Court decision.<sup>37</sup> For that to happen it has to be that  $S$  and  $J$  are aligned in their preferred range, which is  $CJ$  non-

---

<sup>36</sup> Neither case 9 under scenario II nor case 9 under scenario III satisfy Result 5 because if  $S$ 's preferred range is  $I_L$  then the same will apply for  $J$ .

<sup>37</sup> Although feasible, this result is unlikely to be relevant in reality as it requires the Junior Justice to be the median of the Court.

preferred range. Clearly in any other combination,  $CJ$  has the upper hand at attracting at least one additional justice. That immediately eliminates the scenario in which  $CJ$  is the median of the Court. Less intuitively, the scenario in which  $S$  is the median of the Court also doesn't qualify. The reason is that a potential interior solution cannot be optimal for  $S$  as her payoff can be made better off if the opinion is moved to the extreme of the range. In addition,  $S$  and  $J$  have to be located in opposite sides of their preferred range, otherwise there is no point on  $S$  offering an interior point to attract  $J$ 's support. Finally,  $R$  has to be small enough, otherwise  $CJ$  could anticipate everything by offering from the beginning the opinion that  $S$  will end up writing. That leaves us with only two possible cases in which this solution takes place.<sup>38</sup> One of them is the following: Suppose that  $\bar{x}_L < \alpha_{CJ} < \frac{D}{2} < \alpha_J < \frac{L+D-q}{2} < \underline{x}_C < \bar{x}_C < \alpha_S$  and  $R < q < \bar{x}_C - \underline{x}_C$ . It is clear that at  $t = 1$   $CJ$  will either propose  $x_{CJ}^* = \bar{x}_L$  or  $x_{CJ}^* = \underline{x}_C$ . Also it is clear that  $S$  will either propose  $x_S^* = \bar{x}_L$  or  $x_S^* \in I_L$  such that the associated pay-offs for the different paths of the game are as follows

**<<Insert Table Ex3 about here>>**

It is direct that path 3 is dominated by path 4 because if  $CJ$  proposes  $x_{CJ}^* = \bar{x}_L$  then  $S$  gets more pay-off if she proposes  $x_S^* \in I_C$  instead of supporting  $x_{CJ}^*$ . In the same fashion, path 2 is dominated by path 1 because  $S$  gets a lower pay-off if she proposes  $x_S^* = \bar{x}_L$  instead of supporting  $x_{CJ}^*$  when  $CJ$  proposes  $x_{CJ}^* = \underline{x}_C$  (notice that  $r - q < 0$  because  $R - q < 0$ ). From there,  $CJ$  has to decide whether to follow path 1 (to propose  $x_{CJ}^* = \underline{x}_C$ ) or path 4 (to propose  $x_{CJ}^* = \bar{x}_L$ ). But path 4 is the chosen one given that  $1 - (x_S^* - \alpha_{CJ}) > 1 - (\underline{x}_C - \alpha_{CJ}) + R - q$  which is equivalent to  $R - q < \underline{x}_C - x_S^* \leq 0$ . The only part that remains to be determined is

---

<sup>38</sup> In scenario III:  $S$  is capturing  $J$ 's vote. Subcases 3.4 & 6.4.

whether  $J$  supports  $x_S^*$  or  $x_{CJ}^*$ . However, as it is in the interest of  $S$  that  $J$  supports  $x_S^*$ ,  $S$  will propose the farthest right opinion that will be supported by  $J$  which is the one that satisfies  $1 - (\alpha_J - \bar{x}_L) - q = 1 - (x_S^* - \alpha_J)$  or  $x_S^* = 2\alpha_J - \bar{x}_L + q \in [\underline{x}_C + q, \bar{x}_C] \subset [\underline{x}_C, \bar{x}_C]$ . That is, an interior point.<sup>39</sup> Notice that if  $J$  strongly preferred the conservative range and  $R - q < \bar{x}_C - \underline{x}_C$  then  $S$  would propose  $x_S^* = \bar{x}_C$  and attract  $J$ 's support. Alternatively if  $R - q \geq \bar{x}_C - \underline{x}_C$  then  $CJ$  would write the opinion in his non-preferred range. In both cases,  $S$  does not write an interior opinion! It has to be that  $J$  weakly prefers  $I_C$  for Result 6 to hold.

**Result 7 (When the opinion is written inside CJ's preferred range):** *The Court writes an opinion inside CJ's preferred range only when all justices preferred range is the same or when CJ's and S's preferred is not the same as J's preferred range and in addition S's utility from writing the opinion is small enough or when CJ's and J's preferred range is not the same as S's preferred range.*

Evidently Result 7 holds only when equilibrium E1 takes place which are the situations described in the statement. Notice that  $S$ 's reputational concerns will be responsible for  $CJ$  sometimes not being able to write an opinion inside his preferred range. Indeed, the difference between equilibrium E1c and equilibrium E2a is that  $r$  is small in E1c but it is large in E2a.

---

<sup>39</sup> Notice that because of the "seniority assumption under indifference"  $J$  would support  $x_{CJ}^* = \bar{x}_L$  instead of  $x_S^* = 2\alpha_J - \bar{x}_L + q$  hence indeed  $S$  proposes the supremum in the set  $[\underline{x}_C, 2\alpha_J - \bar{x}_L + q)$  and not  $2\alpha_J - \bar{x}_L + q$ . Although  $S$  pay-off function has a discontinuity at its maximum value, which implies that the solution has to be carefully interpreted to consider it a NE, ultimately what matters is that  $S$  gets a better payoff if she proposes an interior opinion to  $J$  such that  $J$  will prefer that to support  $x_{CJ}^* = \bar{x}_L$ .

## 4. Extensions

### 4.1 Policy ranges and Justices ideologies

#### 4.1.1. Justices ideologies might be located inside the policy ranges

The ideologies of the justices might be located inside the doctrinal ranges. Despite the increment in the amount of calculations,<sup>40</sup> we show here that the main results of the paper — there exist three types of equilibria: E1, E2 and E3, and the realization of each of them is essentially determined by the justices range preferences and the size of parameters  $R$  and  $r$  — still hold.

We only describe scenario I (the logic for the other scenarios is analogous). Table 3 summarizes the 35 possible cases.

**<<Insert Table 3 about here>>**

We first notice that when the ideology of a justice is inside a doctrinal range then that range is the preferred range for that justice.<sup>41</sup> In addition, we only need to solve the cases that we did not solve before. That is, we do not need to solve cases 1, 3, 5, 10, 12, 15, 26, 28, 31 and 35. Due to space restrictions we do not show details of the results here but our calculations tell us that all the equilibria fall within the categories of the already known types E1, E2 or E3.

As in our basic model, the alignment of the ideologies of the justices with the different doctrinal ranges and the incentives of  $CJ$  and  $S$  to write the opinion are the elements

---

<sup>40</sup> In our basic model we used to have 10 cases per scenario, now each scenario has 35 cases.

<sup>41</sup> Given the equal length of the ranges, if  $\alpha \in I$  then the distance between  $\alpha$  and the median of  $I$  will be smaller than  $L/2$  but the distance of  $\alpha$  to the median of the other policy range will be larger than  $L/2$ .



determining what equilibria actually take place. A noticeable difference with the basic model is that internal solutions take place more frequently because whenever  $S$  or  $CJ$  have ideologies inside the doctrinal ranges they propose opinions coincident with their own ideologies.

#### ***4.1.2 Policy ranges might overlap***

Doctrinal ranges can overlap or even one of them be located inside the other range. While table 4 shows possible cases in the first situation table 5 shows possible cases in the second situation.<sup>42</sup>

**<<Insert Table 4 and Table 5 about here>>**

Once more we do not show tables with details of all the solutions but just mention the relevant issues. We keep the assumption that the ranges have the same length. We also keep the assumption that a justice proposing or supporting an opinion in his/her non preferred range gets a penalty of  $q$ . Although strictly speaking when  $CJ$  proposes an opinion within the intersection region he is covering both ranges, we consider that  $S$  can propose an opinion in  $CJ$ 's non preferred range that does not intersect. Also, in order to avoid issues on discontinuity of payoffs we assume that an option for the justices is to propose  $\underline{x}_C^- = \supremum[\underline{x}_L, \underline{x}_C[$  or  $\bar{x}_L^+ = \infimum ]\bar{x}_L, \bar{x}_C]$  as opinions.

As it was concluded in subsection 3.1.1, we get that there only exist three types of equilibria: E1, E2 and E3, and their realizations are centrally determined by the justices range preferences and the size of parameters  $R$  and  $r$ . Although in many cases solutions are as in 4.1.1 we do notice some differences. First, there are fewer cases in which all justices are

---

<sup>42</sup> We only consider situations in which the conservative policy range locates inside the liberal range.

located outside the policy ranges (only four compared to ten in 3.1.1) which implies that when overlaps are possible there are more subcases in total. Second, quite often the equilibrium opinion corresponds to  $\underline{x}_C^-$  which, when  $CJ$  is not located inside  $[\underline{x}_L, \underline{x}_C]$ , will usually be the proposal with which  $CJ$  attracts the votes of  $S$ ,  $J$  or both. Third, directly from the previous point, the final opinions of the Court tend to be more inclined to the left (more liberal) as many outcomes that used to be  $\bar{x}_L$  now will be  $\underline{x}_C^- < \bar{x}_L$ .<sup>43</sup>

As for the scenario in which one range is completely located inside the other we only analyze the scenario in which the conservative policy range is a subset of the liberal policy range ( $I_C \subset I_L$  which implies that  $\bar{x}_C < \bar{x}_L$ ). Evidently, now the two policy ranges cannot have the same length such that it might be that  $\hat{x}_C = \frac{\bar{x}_C + \underline{x}_C}{2}$  is larger, equal or smaller than  $\hat{x}_L = \frac{\bar{x}_L + \underline{x}_L}{2}$ . For parsimony we only discuss the scenario in which  $\hat{x}_L < \hat{x}_C$ . The last condition implies that when the ideology of a justice is located inside  $[\underline{x}_C, \bar{x}_C]$  or  $[\bar{x}_C, \bar{x}_L]$  then  $I_C$  is the justice's preferred range but if his ideology is located inside  $[\underline{x}_L, \underline{x}_C]$  then  $I_L$  is the justice's preferred range only if  $\alpha_J < D = \frac{\hat{x}_L + \hat{x}_C}{2}$ .

As before, we only find E1, E2 and E3 type of equilibria. However, now we have possibilities that were not present before. To see that, we discuss the situation in which  $\alpha_J < \alpha_S < \underline{x}_L < \bar{x}_C < \alpha_{CJ} < \bar{x}_L$ . In this case the preferred range for  $J$  and  $S$  is  $I_L$  but it is  $I_C$  for  $CJ$ . What follows is that even when  $CJ$ 's optimum opinion is  $\alpha_{CJ}$  in terms of ideological proximity, that opinion is within the liberal range! Then, if  $R - q$  is large enough (larger than

---

<sup>43</sup> Evidently this inclination to the left is because  $CJ$  is located to the right in the Court, had  $CJ$  been located to the left in the Court then solutions would have been  $\bar{x}_L^+$  and not  $\underline{x}_C^-$  with the final opinions more inclined to the right relative to the base model in which ranges did not overlap.

$\underline{x}_L - \alpha_{CJ}$ ),  $CJ$  would prefer to propose an opinion inside the liberal range (optimally  $x_{CJ}^* = \alpha_{CJ}$ ) so in that way he can attract the support of the other two justices. However,  $CJ$  cannot always propose  $\alpha_{CJ}$  as sometimes  $S$  would prefer to propose something inside  $I_C$  and attract  $J$ 's vote. More specifically, if  $r - q < \underline{x}_C - \alpha_{CJ}$  then  $x_{CJ}^* = \alpha_{CJ}$  but if  $r - q > \underline{x}_C - \bar{x}_C$  then  $x_{CJ}^* = \bar{x}_C$  and when  $r - q \in [\underline{x}_C - \alpha_{CJ}, \underline{x}_C - \bar{x}_C]$  then  $x_{CJ}^* = \underline{x}_C - (r - q)$ . But if  $R - q$  is small enough (smaller than  $\underline{x}_L - \alpha_{CJ}$ ) then  $CJ$  would actually prefer to propose an opinion inside  $I_C$  and let  $S$  propose  $\underline{x}_L$ .

Even more elaborate than the previous, in the situation in which  $\alpha_J < \underline{x}_L < \alpha_S < \underline{x}_C < \bar{x}_C < \alpha_{CJ} < \bar{x}_L$  we have that  $J$  prefers range  $I_L$  and  $CJ$  prefers range  $I_C$  but  $S$ 's preferences are not clear. For two reasons, the characterization of subcases does not follow simply from considering whether  $\alpha_S$  is larger or smaller than  $\frac{D}{2} = \frac{\hat{x}_L + \hat{x}_C}{2}$ . First,  $CJ$  could prefer to propose  $x_{CJ}^* \in ]\bar{x}_C, \bar{x}_L] \in I_L$  instead of  $x_{CJ}^* \in I_C$ , and second, we do not know apriori whether  $J$  prefers to support  $x_{CJ}^* \in ]\bar{x}_C, \bar{x}_L]$  than to support  $x_S^* = \underline{x}_C$ . For the first, it would have to be that  $q < x_{CJ}^* - \underline{x}_C$ . Keeping that in mind and assuming that  $\alpha_S < D/2$  we have to distinguish the following subcases: If  $q > \alpha_{CJ} - \underline{x}_C$  then  $CJ$  has to choose whether to propose  $x_{CJ}^* = \alpha_{CJ} \in I_L$  (which will be supported by at least  $J$ ) or to propose  $x_{CJ}^* \in I_C$  (which will induce  $S$  to propose  $x_S^* = \alpha_S$  and will become the Court opinion). While the first scenario happens when  $R - q > \alpha_S - \alpha_{CJ}$ , the second happens when  $R - q < \alpha_S - \alpha_{CJ}$ . Now if  $q < \bar{x}_C - \underline{x}_C$ , then  $x_{CJ}^* = \underline{x}_C^- \in I_L$  if  $R - q > \alpha_S - \underline{x}_C$  but propose  $x_{CJ}^* \in I_C$  otherwise. Finally

when  $q \in [\bar{x}_C - \underline{x}_C, \alpha_{CJ} - \underline{x}_C]$ ,  $CJ$  proposes an opinion that makes  $J$  indifferent between what  $CJ$  proposes and  $S$  could offer which is  $x_{CJ}^* = \underline{x}_C + q$ .<sup>44</sup>

#### 4.2 Length of the Policy Ranges

It is direct to notice that the results from the basic model hold almost identical when the lengths of the two policy ranges are not the same. After we notice that Lemma 1 is the same if we define  $D \equiv \frac{\bar{x}_C + \bar{x}_L}{2}$  and  $L + D \equiv \frac{\frac{\bar{x}_C + \underline{x}_C}{2} + \frac{\bar{x}_L + \underline{x}_L}{2}}{2}$  then table 1a can be replicated with the same adjustments in the meaning of expressions  $D$  and  $L + D$ . That said, a variation in the length of the doctrinal range changes the apriori likelihood with which a case or a subcase takes place. In order to see this last point, we can calculate the a priori probability that case 1 (regardless of the scenario) takes place when the policy ranges cannot intersect and have the same length  $L$ . That probability is

$$Pbb(L \leq \bar{x}_L \leq \bar{x}_C - L \wedge \bar{x}_C \geq 2L \wedge \alpha_J \geq \bar{x}_C \wedge \alpha_S \geq \bar{x}_C \wedge \alpha_{CJ} \geq \bar{x}_C)$$

If we assume that the probability distributions for the justices' ideologies and the policy ranges are independent, then that same probability can be rewritten as

$$\int_{2L}^1 \left( \int_s^1 f_{\alpha_J}(x) dx \int_s^1 f_{\alpha_S}(x) dx \int_s^1 f_{\alpha_{CJ}}(x) dx \int_L^{s-L} f_{\bar{x}_L}(x) dx \right) f_{\bar{x}_C}(s) ds$$

such that the derivative with respect to  $L$  is equal to

$$- \int_{2L}^1 \left( \int_s^1 f_{\alpha_J}(x) dx \int_s^1 f_{\alpha_S}(x) dx \int_s^1 f_{\alpha_{CJ}}(x) dx \left( f_{\bar{x}_L}(s-L) + f_{\bar{x}_L}(L) \right) \right) f_{\bar{x}_C}(s) ds < 0$$

---

<sup>44</sup> This condition holds regardless whether  $S$ 's preferred range is  $I_L$  or  $I_C$ . Even if  $S$ 's preferred range was  $I_L$  the threat of  $S$  offering  $\underline{x}_C$  will be real as  $1 - (\underline{x}_C - \alpha_S) + r - q > 1 - (x_{CJ}^* - \alpha_S)$  which is equivalent to  $r > 0$  (always hold) when  $x_{CJ}^* = \underline{x}_C + q$ .

Hence, the larger are the policy ranges, the less likely is that a case in which all justices have the same preferred range and the same optimal opinion takes place.<sup>45</sup>

On a different line and probably even more relevant because of its implications, the bigger a doctrinal range is the more likely<sup>46</sup> is that the Court opinion will be written within that range. If the ranges do not have the same length, the probability that more justices will strongly prefer a given range goes up with the size of the range and that increases the probability that the opinion will be written in that range.

### ***4.3 Delegation***

Suppose that to our game we add the option that the justice entitled to write the opinion has the power to delegate that right to another justice. To simplify, if  $CJ(S)$  is entitled to write the opinion then he (she) can pass that right to  $S(CJ)$  with the condition that the opinion has to belong to the range that attracted the largest number of votes. Then it is simple to see that delegation never happens as in that case the entitled justice would not only lose the reputational utility but also he (she) exposes himself (herself) to the scenario in which the other justice could pick a suboptimal point in the range.

However if the Court faces more than one case to resolve, say  $N$ , and each justice is only able to write the opinion of  $n < N$  cases (there is a capacity constraint) such that each case  $i$  has its own set of  $(r_i, R_i)$  then interesting implications follow.  $CJ$  writes the opinion in his  $n$  most valuable opinions (notice that value will not only depend on  $R_i$  but also on the justices ideologies and the location of the doctrinal ranges). After completing his  $n$  opinions,

---

<sup>45</sup> Using an analogous reasoning we can prove that as well as for case 1 the a priori likelihood for cases 4 and 10 in all the scenarios (I, II and III) from table 1a goes down with  $L$ .

<sup>46</sup> Considering an apriori probability for all possible locations for justices' ideologies and policy ranges.

whenever possible (equilibria E1 and E2) *CJ* will delegate that right to *S*. Although *S* will not write the opinion at *CJ* ideal point *CJ* prefers that instead of letting *S* write the opinion at her ideal point (which sometimes could be in the other policy range). In addition, from the  $N - n$  cases left, *S* writes the decision of the  $n$  (or closest to  $n$ ) most valuable opinions that define equilibrium E3.

## **5. Stylized Case Illustrations: Obamacare and Campaign Finance**

In his first decade as Chief Justice, Roberts only twice joined with the Court's four most liberal justices to form a 5-4 majority leading to liberal (and unexpected) case outcomes for the Court. These two decisions – one involving health care and the other campaign finance – nicely illustrate, in stylized fashion, insights from our model.

### **5.1 NFIB v. Sebelius: Authorial Competition and Health Care (Obamacare)**

The voting and opinion authorship of the Supreme Court decision in *NFIB v. Sebelius*, the challenge to the Patient Protection and Affordable Care Act (ACA) or “Obamacare,” came as a surprise to many court observers, scholars and the public.<sup>47</sup> The press generally presumed that Justice Kennedy, as the median court justice, would be the key vote in deciding which way the case would fall, and it would have surprised few if he had voted with the more liberal wing of the Court 5-4 upholding Obamacare and authored the decision himself. To the extent that Chief Justice Roberts could have been expected to write the opinion for a

---

<sup>47</sup> Jonathan Adler, “Judicial Minimalism, the Mandate, and Mr. Roberts,” in *The Health Care Case: The Supreme Court's Decision and its Implications* 71 (2013) (ed. Nathaniel Persily, Gillian E. Metzger and Trevor W. Morrison) (“Chief Roberts's opinion ... caught most commentators by surprise. Few who hoped or expected the mandate to prevail foresaw that the Chief Justice would control the outcome.”).

winning coalition, it was expected that he would join the Court's other conservatives and deliver a defeat to Obamacare. What resulted instead was a victory for the most important aspect of Obamacare – the individual mandate to buy health insurance – with Justice Kennedy on the losing side with the conservatives and the Chief Justice writing the opinion for an Obamacare victory joined by the Court's four liberals.<sup>48</sup> It was the first time that Chief Justice Roberts had joined the Court's four more liberal members in a 5-to-4 vote in his seven-year tenure on the Court.

Numerous explanations flourished about how such an unexpected result emerged. One popular explanation was that Roberts voted with the left because of the national importance of the case and the need to uphold the legitimacy of the Court to the public.<sup>49</sup> Striking down the individual mandate – the centerpiece of Obamacare – along ideological lines would put the Court in an unseemly position and weaken the institution's good standing with the American public.<sup>50</sup> Another explanation was that Roberts's vote was entirely consistent with his judicial philosophy and his position in past cases posing similar interpretive problems where he sustained the challenged statute through a creative reading of

---

<sup>48</sup> The case had a number doctrinal issues at stake impacting several Obamacare provisions (e.g., the individual mandate, extension to Medicare). While a majority of the justices, including Roberts and the other conservative justices, held that the ACA's individual mandate to buy insurance could not be supported by Congress's power under the Commerce Clause or Necessary and Proper Clause of the Constitution, Roberts parted with the conservatives by finding that the penalty for not buying insurance could be viewed merely as a tax, and that Congress' had such taxing power under the Constitution. In other words, there was an alternative reasonable reading of the statutory text that, in Roberts' view (along with the liberals of the Court), could sustain the ACA's individual mandate as merely a tax. However, a Court majority did hold that the expansion of Medicaid under Obamacare was not a valid exercise of Congress's spending power as it would require states to accept the expansion or risk losing current Medicaid funding.

<sup>49</sup> Greenhouse (2013b:188) ("Chief Justice Roberts was unable to save the Court from his friends [other Court conservatives], so he decided to save the Court he revered by saving a statute that he clearly disliked intensely.")

<sup>50</sup> See, for example, David L. Franklin, "Why did Roberts Do It?," Slate (June 28, 2012) ([http://www.slate.com/articles/news\\_and\\_politics/jurisprudence/2012/06/john\\_roberts\\_broke\\_with\\_conservatives\\_to\\_preserve\\_the\\_supreme\\_court\\_s\\_legitimacy.html](http://www.slate.com/articles/news_and_politics/jurisprudence/2012/06/john_roberts_broke_with_conservatives_to_preserve_the_supreme_court_s_legitimacy.html)) (last visited September 3, 2017).

the statutory text.<sup>51</sup>

Another plausible explanation is suggested by the model we present in this paper – in particular, the decision was as much a battle over authorial legacy and the defining actor of this Court -- a Roberts Court or a Kennedy Court -- as it was about the legitimacy of the Roberts's Court or Justice Roberts's consistent judicial philosophy.

Chief Justice Roberts had a number of reasons to be wary of Justice Kennedy's behavior in important cases. First, Justice Kennedy, rather than merely being the median ("swing") justice, was either the most senior justice with opinion assignment power of the five most liberal justices or an associate justice with no opinion assignment power of the five most conservative justices. Put differently, if Justice Kennedy voted left, he could control the opinion draft (through self-assignment or assigning to one of the other liberal justices). Indeed, authorial prestige utility over salient cases could be a strong incentive for Kennedy to abandon the Chief Justice's conservative majority coalition and side with the liberal justices, reinforcing the "Kennedy Court" environment.<sup>52</sup> Second, Justice Kennedy had a known reputation as a vote "flipper."<sup>53</sup> Going back to the early 1990s, Kennedy proved himself capable of "betrayal" to his conservative colleagues, voting with the conservative majority at conference and then, as opinion drafts circulated, switching sides to author an

---

<sup>51</sup> As Professor Adler put it, "... Chief Roberts's NFIB opinion is consistent with his own stated judicial philosophy and record on the bench. The key elements of [Roberts'] opinion are of a piece with his prior opinions as a justice and circuit court judge and his accounts of the proper judicial role. ... [T]here is no reason to ascribe him political motives, or worse." (Adler 2013:171).

<sup>52</sup> See Lyle Denniston, SCOTUS Blog (April 9, 2010), "'The Kennedy Court,' only more so," (addressing the new opinion assignment position Kennedy would soon be in when Stevens retired.) ("Would Kennedy be inclined to line up more often in coalitions with that [liberal] bloc? It might have that effect on him, at least some of the time. It is not just a ceremonial task, and can, indeed, be an opportunity leading to a more significant leadership role.") (<http://www.scotusblog.com/2010/04/the-kennedy-court-only-more-so/>)

<sup>53</sup> "Kennedy also changed course on school-prayer and criminal-justice cases (while not reversing a vote in conference as he did on abortion), leading law clerks at their end-of-session theatrical to label him 'Flipper'." Rowl, Evans and Robert Novak, Justice Kennedy's Flip, The Washington Post (September 4, 1992) ([https://www.washingtonpost.com/archive/opinions/1992/09/04/justice-kennedys-flip/17eb4e0b-72f6-4678-b5bb-7a3e8f79b395/?utm\\_term=.cb689a1ec945](https://www.washingtonpost.com/archive/opinions/1992/09/04/justice-kennedys-flip/17eb4e0b-72f6-4678-b5bb-7a3e8f79b395/?utm_term=.cb689a1ec945)).



opinion with the four more liberal justices on the Court.<sup>54</sup> Moreover, Kennedy had sided with the liberals in 5-4 cases more than any other conservative justice (twenty-five times during the Roberts's Court; none of the other conservative justices had done so more than twice).<sup>55</sup> Third, the general perception of the Roberts's Court being consumed and overtaken by the "Kennedy Court" could not be lost on Chief Justice Roberts. The public media and legal commentators had taken broad notice of the central role Kennedy had taken over Supreme Court policy.<sup>56</sup> By the time of the Obamacare decision, Chief Justice Roberts would be well aware of the public's perception about who was in control of the Court's jurisprudence and the threat to his judicial legacy as chief justice.

To sum up, the value in leading the Court in this monumental case, through opinion authorship, would have great appeal to the Chief Justice, even if there were some loss of policy gain. If the authorial incentives were there for Kennedy to vote with the liberal wing of the Court and then self-assign the opinion (or coordinate a more fractured opinion on the right that gave him the authorship control over the key elements that he and other

---

<sup>54</sup> In the case of *Lee v. Weisman*, 505 U.S. 833 (1992), for example, Kennedy reportedly switched his vote during deliberations, going on to write the majority opinion joined by the four liberal members of the Court (ruling that public schools may not sponsor clerics to conduct prayer). In another landmark case, *Planned Parenthood v. Casey*, 505 U.S. 833 (1992), Kennedy, who sided with the conservatives in initial conference vote (and from which Chief Justice Rehnquist had assigned himself the opinion writing), later shifted his vote towards the left, joining O'Connor and Souter (as co-author of the new majority opinion) to uphold the abortion rights precedent of *Roe v. Wade*, 410 U.S. 113 (1973).

<sup>55</sup> Amanda Cox and Matthew Ericson, "Siding With the Liberal Wing," *The New York Times* (June 28, 2012) (<http://www.nytimes.com/interactive/2012/06/28/us/supreme-court-liberal-wing-5-4-decisions.html>) (last visited August 17, 2017).

<sup>56</sup> See, for example, David Cole, "This Isn't the Roberts Court – It's the Kennedy Court," *The Nation* (September 24, 2015) ("Convention dictates that we call it the Roberts Court, but in truth this is the Kennedy Court.") (<https://www.thenation.com/article/this-isnt-the-roberts-court-its-the-kennedy-court/>); Andrew Cohen, "This is Kennedy's Court – the Rest of the Justices Just Sit on It," *The Atlantic* (May 29, 2013) ("Decisions like these remind us that, right now, it's the Kennedy Court, and may be for quite some time.") (<https://www.theatlantic.com/national/archive/2013/05/this-is-kennedys-court-the-rest-of-the-justices-just-sit-on-it/276309/>); Robert Barnes, "Trump makes his pick, but it's still Anthony Kennedy's Supreme Court," (January 31, 2017) ("President Trump has chosen his first nominee, but it remain Justice Anthony M. Kennedy's Supreme Court.") ([https://www.washingtonpost.com/politics/courts\\_law/trump-makes-his-pick-but-its-still-anthony-kennedys-supreme-court/2017/01/31/1de12472-e7e0-11e6-bf6f-301b6b443624\\_story.html?utm\\_term=.59de77a08813](https://www.washingtonpost.com/politics/courts_law/trump-makes-his-pick-but-its-still-anthony-kennedys-supreme-court/2017/01/31/1de12472-e7e0-11e6-bf6f-301b6b443624_story.html?utm_term=.59de77a08813)).

conservative justices could agree), then Roberts would again be marginalized as leader of his Court. Preventing Kennedy from continuing to undermine Roberts's legacy as the Chief Justice and leader of the Roberts's Court would be an appealing reason for Roberts to vote strategically with the Court liberals in a case of such importance.

Figure 5 illustrates the moves. The case involved a number of doctrinal challenges (Commerce Clause, Taxing Power) and possible outcomes (uphold all parts of Obamacare, uphold some parts – such as severing Medicare but upholding the individual mandate, or invalidate the complete act). The doctrinal frames overlap – that is, the Court could uphold all, part, or none of the ACA on the Taxing Power while invalidating all, parts or none of it under the Commerce Clause power of Congress. Typically, liberal justices consider the Commerce Clause to be a broad power to legislate, while conservatives view the Commerce Clause as a much narrower federal power. Thus, we situate Roberts and Kennedy within the Narrow Commerce Clause doctrine (with Roberts more conservative than Kennedy<sup>57</sup>) and the liberal justices (*J*) within the Broad Commerce Clause doctrine.

<< Insert Figure 5 about here >>

The preferred result from Roberts's perspective would be to author an opinion around a policy point near his own ideal point (CJ), gaining both authorship and policy utility. However, to do that would require a commitment from Kennedy to stay in the majority. If Kennedy joins Roberts in the conference vote to invalidate the restriction, but Roberts assigns the opinion to himself (which by all reports he did initially), Kennedy has incentives to later flip and join with the liberals (*J*) in upholding substantial parts, if not all, of Obamacare, and to author the opinion himself. In that scenario, Kennedy loses some outcome utility (would

---

<sup>57</sup> Martin-Quinn scores show that Justice Roberts generally votes more conservatively than Justice Kennedy. (Martin and Quinn 2017).

prefer that the restriction be held invalid), but gains in authorship utility. This option would be especially attractive because Kennedy could uphold Obamacare while still holding that Commerce Clause power does not extend to the individual mandate of the ACA. As long as the gain in authorship utility is greater than loss of case outcome utility, Kennedy would be tempted, especially for the most important case of the Roberts Court era.

Roberts, of course, knows the incentive structure for Kennedy and can engage in strategic voting if necessary to avoid a bad result for himself if Kennedy were to flip his vote. One way to ensure Kennedy stays in the conservative majority is to offer Kennedy authorship for a conservative outcome near CJ, but that would be a loss of potential authorship prestige and legacy utility for Roberts. Another alternative for Roberts would be to vote with the liberals to hold the Obamacare mandate valid ( $x^*$ ), while doing it under Congress's taxing power (which is in fact what Roberts did). If the utility gain from authorship would be larger than the utility loss to Roberts from allowing Kennedy to author an opinion (essentially at the same location as Roberts is willing to now take), then Roberts would be best off to join the liberals ( $J$ ), uphold the individual mandate (under the taxing power), and author the opinion himself. In that scenario, Kennedy has no reason to vote with Roberts and the liberals and he thus becomes a dissenter. The model as here presented fits nicely with the observable behavior of Roberts and Kennedy in the Obamacare case. Roberts joined with the four liberals of the Court in a 5-4 decision upholding the Obamacare mandate under the taxing power (leaving Narrow Commerce Clause doctrinal limitation in place). Kennedy dissented.

## 5.2. Williams-Yulee v. Florida State Bar: Authorial Control and Campaign Finance

In 2015, Chief Justice Roberts again, and surprisingly,<sup>58</sup> sided with the liberal wing of the Court in a 5-4 case challenging campaign finance reform. The case involved a Florida state legal-ethics rule that barred judicial candidates from personally soliciting campaign contributions. Roberts had a general reputation of protecting political speech where money was concerned, so to many observers Roberts's vote appeared on its surface to be a step back from his previous preferences. But a closer reading of the case shows that the doctrinal position – whether to use “strict scrutiny” rather than weaker forms of scrutiny to evaluate restrictions on political speech – remained in the conservatives' corner as Chief Justice Roberts endorsed the strict scrutiny standard of review; he merely found that in this particular case the state restriction could stand under that test. Put differently, the larger impact of the case – the doctrinal choice – remained a conservative one as other government restrictions on campaign spending would continue to be viewed through this higher standard for constitutionality, which of course would mean that fewer restrictions should survive more generally.

Why might Roberts join with the liberals in this case? One argument is that such outcome was consistent with the Chief Justice's stated goals of improving the credibility of the judiciary. Given that thirty states had similar restriction on judicial candidates' campaign

---

<sup>58</sup> Typical of the commentary was Slate Magazine writer Mark Stern's analysis that “[e]verybody knows Williams-Yulee will probably win this case, and the five conservatives will claim another victory in their crusade against campaign finance regulations.” Mark Joseph Stern, “Judicial Integrity: The Supreme Court ponders judges' freedom to panhandle.” Slate Magazine (January 21, 2015) ([http://www.slate.com/articles/news\\_and\\_politics/supreme\\_court\\_dispatches/2015/01/williams\\_yulee\\_v\\_florida\\_bar\\_the\\_supreme\\_court\\_ponders\\_judicial\\_elections.html](http://www.slate.com/articles/news_and_politics/supreme_court_dispatches/2015/01/williams_yulee_v_florida_bar_the_supreme_court_ponders_judicial_elections.html)). Last visited August 26, 2017).

solicitations, Roberts vote to uphold such restrictions appeared to be consistent with the goal of improving judicial credibility.<sup>59</sup>

Another explanation relies in part on authorial control. Justice Kennedy could have sided similarly with the liberals on outcome (supposing Roberts had not), and gained an opportunity for authorship and refinement of an important area of jurisprudence for the Court (at little or no cost to Kennedy's own conservative doctrinal preferences as he would be acting within the preferred strict scrutiny doctrine). Roberts, by taking that role with the liberals, circumvented any temptation Kennedy may have had to gain authorial prestige at Roberts's expense and preventing Kennedy from detracting from the Chief Justice's "Robert's Court" legacy.

Figure 6 below illustrates the strategic authorship perspective on the case. Here we have two doctrines – strict scrutiny and intermediate/rational basis – with the former leading to government restrictions on judicial campaign contributions being found invalid in most cases, and the latter leading to such restrictions being found valid in most cases. The doctrines do overlap, meaning a government restriction could meet both tests on the validity or invalidity of the restriction. While the natural voting lineup in this stylized arrangement should be *CJ* (Roberts) and *SJ* (Kennedy) voting together to invalidate the Florida law under strict scrutiny, when authorship utility is considered the voting alignments can shift.

<<Insert Figure 6 about here>>

As with the Obamacare decision, Kennedy has incentives to join with the liberals (*J*) in holding the Florida law valid, authoring the opinion himself while still holding on to his

---

<sup>59</sup> See, Jeffrey Rosen, "Roberts's Rules," *The Atlantic* (January/February 2007) (<https://www.theatlantic.com/magazine/archive/2007/01/robertss-rules/305559/>) (last visited September 4, 2017).

preferred strict scrutiny doctrine. In that scenario, Kennedy loses some outcome utility (would prefer that the restriction be held invalid), but gains in authorship utility (especially attractive because he can do so while still holding that strict scrutiny is the doctrinal standard of review). As long as the gain in authorship utility is greater than loss of case outcome utility, Kennedy is tempted. Roberts, of course, knows the incentive structure for Kennedy and can engage in strategic voting if necessary to avoid a bad result for himself if Kennedy were to flip his vote. An appealing option for Roberts would be to vote with the liberals to hold the Florida law valid ( $x^*$ ), while doing it under his preferred doctrine – the strict scrutiny test (which is in fact what Roberts did). If the utility gain from authorship would be larger than the utility loss to Roberts from allowing Kennedy to author an opinion (essentially at the same location as Roberts is willing to now take), then Roberts would be best off to join the liberals ( $J$ ), uphold the Florida law (under strict scrutiny), and author the opinion himself. In that scenario, Kennedy has no reason to vote with Roberts and the liberals and he thus becomes a dissenter (which in fact is what he did). The model as here presented fits nicely with the observable behavior of Roberts and Kennedy in the *Williams-Yulee* case. Roberts joined with the four liberals of the Court in a 5-4 decision upholding the Florida law under the strict scrutiny test. Kennedy dissented.

## 7. Conclusion

The prestige and legacy utility of authoring Supreme Court decisions adds a heretofore underappreciated dimension of strategic behavior on the Supreme Court. We explored the authorial incentives of the chief justice, who holds the greatest power over opinion authorship, and the next most senior justice, who also holds considerable property rights over opinion authorship when not in the coalition of the chief justice. Our model

revealed surprising voting alignments among the justices and case outcomes based on the authorship prerogatives. For example, the chief justice may vote against his preferred outcome in order to capture authorial utility (prestige and/or legacy utility) that would be lost if the next most senior justice authored the same opinion. The chief justice's voting, and authoring the opinion, with the opposing coalition may or may not weaken the opposing coalition's policy outcome depending on where the next most senior justice would have positioned the outcome (often constrained by the limits of legal doctrine) had he been able to do so with the opposing coalition; but the action (and gain in utility) for the chief justice may result primarily from authorship utility (both in terms of being the author of an important case – prestige utility – as well as preventing other justices whose authorship would weaken the legacy of the chief justice's "Court." We illustrated the insights of the model through stylized case presentations of important health care and campaign finance decisions of the Supreme Court. In sum, our work here suggests that the nuances of strategic authorial behavior should be considered when analyzing Supreme Court voting and case outcomes. Indeed, further development of this authorial theory of the Supreme Court, as well as empirical analyses of strategic authorship, are warranted.

## References

Adler, Jonathan. 2013. Judicial Minimalism, the Mandate, and Mr. Roberts, in N. Persily, G. E. Metzger and T. Morrison, ed., *The Health Care Case: The Supreme Court's Decision and its Implications*. New York, NY: Oxford University Press.

Baird, V. and T. Jacobi. 2009. How the Dissent Becomes the Majority: Using Federalism to Transform Coalitions in the U.S. Supreme Court. 59 *Duke Law Journal* 183-238.

Benesh, Sara C., Reginald S. Sheehan, and Harold J. Spaeth. 1999. Equity in Opinion Assignment on the United States Supreme Court, 39(4) *Jurimetrics* 377-389.

Black, Duncan. 1948. On the Rationale of Group Decision-making, 56 *Journal of Political Economy* 23-34.

Brenner, Saul. 1993. The Chief Justices' Self Assignment of Majority Opinions in Salient Cases, 30 *Social Science Journal* 143-150.

Brenner, Saul, and Harold J. Spaeth. 1988. Majority Opinion Assignment and the Maintenance of the Original Coalition on the Warren Court, 32 *American Journal of Political Science* 72-81.

C-Span. 1996. Burger Court Legacy, C-Span Video, October 3, 1996 (<https://www.c-span.org/video/?77166-1/burger-court-legacy>) (visited on June 5, 2017).

Clark, T. S., J. R. Lax, and D. Rice. 2015. Measuring the Political Salience of Supreme Court Cases. 3(1) *The Journal of Law and Courts* 37-65.

Carrubba, C., B. Friedman, A. Martin, and G. Vanberg. 2012. Who Controls the Content of Supreme Court Opinions?, 56(2) *American Journal of Political Science* 400-412.



Cross, F., T. Jacobi, and E. Tiller. 2012. A Positive Political Theory of Rules and Standards. 2012 *Illinois Law Review* 1-42.

Danelski, David J. 1978. The Influence of the Chief Justice in the Decisional Process of the Supreme Court, in S. Goldman and A. Sarat, *American Court Systems: Readings in Judicial Process and Behavior*. San Francisco: W.H. Freeman.

Davis Sue. 1990. Power on the Court: Chief Justice Rehnquist's Opinion Assignments, 74 *Judicature* 66-72.

Epstein, L. and J. Knight. 1998. *The Choices Justices Make*. Washington D.C.: CQ Press.

Epstein, L., R. Posner, and W. Landes. 2013. *The Behavior of Federal Judges*. Cambridge MA: Harvard University Press.

Epstein L. and J. Segal. 2000. Measuring Issue Salience. 44 *American Journal of Political Science* 66-83.

Greenhouse, Linda. 2013a. Chief Justice Roberts in His Own Voice: The Chief Justice's Self-Assignment of Majority Opinions, 97(2) *Judicature* 90-97.

Greenhouse, Linda. 2013b. Is It the Roberts Court?, in N. Persily, B. Metzger, and T. Morrison, ed., *The Health Care Case: The Supreme Court's Decision and Its Implications*. New York, NY: Oxford University Press.

Hammond, T., C. Bonneau, and R. Sheehan. 2005. *Strategic Behavior and Policy Choice on the U.S. Supreme Court*. Stanford: Stanford University Press.

Jacobi, Tonja, and Emerson H. Tiller. 2007. Legal Doctrine and Political Control, 23(2) *Journal of Law, Economics & Organization* 326-345.

Kennedy, Anthony M. 2006. William Rehnquist and Sandra Day O'Connor: An Expression of Appreciation, 58 *Stanford Law Review* 1663-1674.

Landa, Dimitri and Jeffrey Lax. 2009. Legal Doctrine on Collegial Courts. 71(3) *Journal of Politics* 946-63.

Lax, Jeffrey. 2011. The New Judicial Politics of Legal Doctrine, 14 *Annual Review of Political Science* 131-157.

Lax, J. and C. Cameron. 2007. Bargaining and Opinion Assignment on the U.S. Supreme Court, 23(2) *Journal of Law, Economics & Organization* 276-302.

Maltzman, F., J. Spriggs, and P. Wahlbeck. 2000. *Crafting Law on the Supreme Court: The Collegial Game*. New York, NY: Cambridge University Press.

Maltzman, F., and P. J. Wahlbeck. 2004. A Conditional Model of Opinion Assignment on the Supreme Court, 57 *Political Research Quarterly* 551-563.

Maltzman, F. and P. J. Wahlbeck. 1996. May It Please the Chief? Opinion Assignments in the Rehnquist Court, 40 *American Journal of Political Science* 421-443.

Martin, Andrew, and Kevin Quinn. 2017. Martin-Quinn Scores. Berkeley: University of California (<http://mqscores.berkeley.edu/measures.php>).

Mullins Morell E. 2003. Tools, Not Rules: The Heuristic Nature of Statutory Interpretation, 30 *Journal of Legislation* 1-76.

Murphy, Walter. 1964. *Elements of Judicial Strategy*. Chicago: University of Chicago Press.

O'Connor, Sandra Day. 1990. The Judiciary Act of 1789 and the American Judicial Tradition, 50 *University of Cincinnati Law Review* 1-13.

Posner, Richard A. 2012. The Rise and Fall of Judicial Self-Restraint, 100 *California Law Review* 519-556.

Rehnquist, William H. 1987. *The Supreme Court: How It Was, How It Is*. New York, NY: William Morrow and Co.

Rohde, David W. 1972. Policy Goals Strategic Choice and Majority Opinion Assignments in the U.S. Supreme Court. 16 *Midwest Journal of Political Science* 652-682.

Rohde, D., and H. Spaeth. 1976. *Supreme Court Decision Making*. San Francisco: W. H. Freeman.

Schwartz, Bernard. 1996. *The Warren Court: A Retrospective*. New York, NY: Oxford University Press.

Schwartz, Edward P. 1992. Policy, Precedent, and Power: A Positive Theory of Supreme Court Decision-Making, 8 *Journal of Law, Economics & Organization* 219-52.

Segal, J. and H. Spaeth. 2002. *The Supreme Court and the Attitudinal Model Revisited*. New York, NY: Cambridge University Press.

Slotnick, Elliot E. 1978. The Chief Justices and Self-Assignment of Majority Opinions, 31 *Western Political Quarterly* 219-225.

Slotnick, Elliot E. 1979. Who Speaks for the Court? Majority Opinion Assignment from Taft to Burger, 23 *American Journal of Political Science* 60-77.

Smith, C., C. DeJong, and M. McCall. 2011. *The Rehnquist Court and Criminal Justice*. Lanham, MD: Lexington Books.

Spaeth, Harold J. 1984. Distributive Justice: Majority Opinion Assignments in the Burger Court, 67 *Judicature* 299-304.

State Bar of Wisconsin. 2016. The Roberts Court. Session at the 2016 Annual Meeting of the State Bar of Wisconsin. (<http://amc-archive.wisbar.org/sessions/the-roberts-court/>)(visited June 5, 2017).

Steamer, Robert J. 1986. *Chief Justice: Leadership and the Supreme Court*. Columbia, South Carolina: University of South Carolina Press.

Stone, Geoffrey R. 2012. Citizens United and Conservative Judicial Activism, 2012 *University of Illinois Law Review* 485-500.

Sunstein, Cass R., and Adrian Vermeule. 2015. The New Coke: On The Plural Aims of Administrative Law, 2015 *Supreme Court Review* 41-88.

Wahlbeck, Paul J. 2006. Strategy and Constraint on Supreme Court Opinion Assignment, 154 *University of Pennsylvania Law Review* 1729-1755.

Wood, Sandra Lee. 1997. In the Shadow of the Chief: The Role of the Senior Associate Justice, 2 *Journal of Supreme Court History* 25-35

## Appendix

**Proof of Lemma 1:** I and III are direct. II requires additional explanations. First, we notice that G's preferred range is  $I_C$  if and only if  $\frac{\bar{x}_C + \underline{x}_C}{2} - \alpha < \alpha - \frac{\bar{x}_L + \underline{x}_L}{2}$  which is equivalent to  $\alpha > \frac{\frac{\bar{x}_C + \underline{x}_C}{2} + \frac{\bar{x}_L + \underline{x}_L}{2}}{2} = \frac{D}{2}$ . The fact that G's preferred range is  $I_C$  implies that G is closer to  $\underline{x}_C$  than  $\bar{x}_L$  (and ergo any point in  $I_L$ ) follows directly after we notice that  $\underline{x}_C - \alpha < \alpha - \bar{x}_L$  is true given that  $\alpha > \frac{\bar{x}_L + \underline{x}_C}{2} = \frac{D}{2}$ . But we cannot be sure that G will be closer to  $\bar{x}_C$  (or other points nearby  $\bar{x}_C$ ) than  $\bar{x}_L$ . For G to be closer to  $\bar{x}_C$  than to  $\bar{x}_L$  (and ergo closer to any point in  $I_C$  than any point in  $I_L$ ) it has to be that  $\bar{x}_C - \alpha < \alpha - \bar{x}_L$  or equivalently that  $\alpha > \frac{\bar{x}_L + \bar{x}_C}{2} = \frac{L+D}{2}$ . Finally, when  $\alpha \in \left[\frac{D}{2}, \frac{L+D}{2}\right]$  then in some cases G will be closer to  $I_L$  ( $x$  in  $I_L$  has to be close enough to  $\bar{x}_L$ ) and in some others to  $I_C$  ( $x$  in  $I_C$  has to be close enough to  $\underline{x}_C$ ). More specifically, if we call  $\hat{x}$  the point in  $I_C$  that makes G indifferent with  $\bar{x}_L$ , that is  $\hat{x} - \alpha = \alpha - \bar{x}_L$  then any point in  $[\underline{x}_C, \hat{x}] \subset I_C$  will be preferred by J than any point in  $I_L$ . And if we call  $\tilde{x}$  the point in  $I_L$  that makes J indifferent to point  $x \in [\hat{x}, \bar{x}_C] \subset I_C$  then any point in  $[\tilde{x}, \underline{x}_L] \subset I_L$  will be preferred by G than point  $x \in [\hat{x}, \bar{x}_C] \subset I_C$ . The explanation for when  $\alpha < \frac{D}{2}$  is analogous to the case in which  $\alpha > \frac{D}{2}$ . **End of Proof.**

**Proof of Proposition 1:** Using backwards induction, we find the solution for each of the cases that take place in the three scenarios. The identification of equilibria E1-E3 follows directly. We start with scenario I in which  $\alpha_J < \alpha_S < \alpha_{CJ}$ . Table 1a (which mentions the type of E1-3 equilibria associated) summarizes all the solutions associated to figure 3a.

Because the optimal opinion for the three justices is the same (preferred range is the same for all of them), the solutions for cases 1 and 10 fall in the category of equilibrium E1a. CJ proposes his optimal opinion and both J and S support that. While in case 1 CJ proposes and writes opinion  $x_{CJ}^* = \bar{x}_C$ , in case 10, CJ proposes and writes opinion  $x_{CJ}^* = \underline{x}_L$ .

In case 2 we notice that  $I_C$  is the preferred range both for CJ and S but not necessarily for J (for that, it has to be that  $\alpha_J > D/2$ , Lemma 1.II). For that reason we need to analyze the different scenarios depending on the value of  $\alpha_J$ . If  $\alpha_J > (L + D)/2$  then J strongly prefers  $I_C$

and CJ can propose  $x_{CJ}^* = \bar{x}_C$  which will be supported by the three justices (equilibrium E1a takes place). In the same clean form, if  $\alpha_J < D/2$  then J at least weakly prefers  $I_L$  such that J supports  $\bar{x}_L$  over any proposal in  $I_C$ . Then, if  $r - q > (\bar{x}_C - \bar{x}_L)$  we know that if CJ proposes  $x_{CJ}^* = \bar{x}_C$  then S follows by proposing  $x_S^* = \bar{x}_L$ , which is supported by J. Anticipating that, CJ proposes opinion  $x_{CJ}^* = \bar{x}_L$  which is supported by J (equilibrium E2a takes place). Evidently if  $r - q < (\bar{x}_C - \bar{x}_L)$  then CJ does not need to worry because S always support him and then CJ proposes and writes opinion  $x_{CJ}^* = \bar{x}_C$  (equilibrium E1b takes place). The question is what happens when  $\alpha_J \in [\frac{D}{2}, \frac{D+L}{2}]$ ? The answer will depend on J and S incentives to support CJ. Because J's preferred range is  $I_C$  this justice will support  $x_{CJ}^* = \bar{x}_C$  instead of  $x_S^* = \bar{x}_L$  as long as  $1 - (\alpha_J - \bar{x}_L) - q < 1 - (\bar{x}_C - \alpha_J) \leftrightarrow \alpha_J \in [(L + D - q)/2, (L + D)/2]$  or as long as  $\alpha_J \in [D/2, (L + D - q)/2]$  and  $r - q < (\bar{x}_C - \bar{x}_L)$  such that S does not have an incentive to offer  $x_S^* = \bar{x}_L$  (in both situations the equilibrium E1a takes place). Instead when  $\alpha_J \in [D/2, (L + D - q)/2]$  and  $r - q > (\bar{x}_C - \bar{x}_L)$  CJ can do better than proposing  $x_{CJ}^* = \bar{x}_L$ , he can offer the opinion that will make J indifferent between supporting him and  $x_S^* = \bar{x}_L$ , that is  $1 - (\alpha_J - \bar{x}_L) - q < 1 - (x_{CJ}^* - \alpha_J) \leftrightarrow x_{CJ}^* = 2\alpha_J - \bar{x}_L + q \in [\underline{x}_C + q, \bar{x}_C]$ . This again is an equilibrium E1a but it defines an interior and not corner solution.

Case 3 is a little more involved than case 2 because now both J's and S's preferred ranges are unknown. Thanks to that, however we are able to find for first time equilibria E2b and E3. We first notice that even when in principle J and S are choosing between  $\bar{x}_L$  and  $\underline{x}_C$ , because CJ's optimal opinion is  $\bar{x}_C$  CJ sometimes will convince S to support his proposal  $x_{CJ}^* \in [\underline{x}_C, \bar{x}_C]$ . More specifically, if S or J prefer  $\bar{x}_C$  than  $\bar{x}_L$  then  $x_{CJ}^* = \bar{x}_C$  and CJ writes that opinion. Consider first the situation in which  $\alpha_J > \frac{\bar{x}_L + \underline{x}_C}{2}$  (S and J's preferred range is  $I_C$ ). For S to prefer  $\bar{x}_C$  than  $\bar{x}_L$  it has to be that  $1 - (\bar{x}_C - \alpha_S) > 1 - (\alpha_S - \bar{x}_L) + r - q$  or that  $\alpha_S > \frac{\bar{x}_L + \bar{x}_C}{2} + \frac{r-q}{2}$  and for J to prefer  $\bar{x}_C$  than  $\bar{x}_L$  it has to be that  $1 - (\bar{x}_C - \alpha_J) > 1 - (\alpha_J - \bar{x}_L) - q$  or that  $\alpha_J > \frac{\bar{x}_L + \bar{x}_C}{2} - \frac{q}{2}$ . If any of the two previous conditions hold then CJ proposes  $x_{CJ}^* = \bar{x}_C$  which is accepted by at least one justice such that CJ writes  $x_{CJ}^* = \bar{x}_C$ . Now, still considering that  $\alpha_J > \frac{\bar{x}_L + \underline{x}_C}{2}$  and both  $\alpha_S < \frac{\bar{x}_L + \bar{x}_C}{2} + \frac{r-q}{2}$  and  $\alpha_J < \frac{\bar{x}_L + \bar{x}_C}{2} - \frac{q}{2}$  then CJ will offer

an opinion in  $I_C$  that will make at least S or J indifferent with  $\bar{x}_L$ . While in the case of S, her indifference point is  $2\alpha_S - \bar{x}_L - (r - q)$ , in the case of J, his indifference point is  $2\alpha_J - \bar{x}_L + q$ . CJ will propose the maximum of these two values (up to here the two characterized equilibria are E1a). Now, when  $\alpha_J < \frac{\bar{x}_L + \underline{x}_C}{2} < \alpha_S$  we know with certainty that J's preferred range is no longer  $I_C$  but instead  $I_L$ . That implies that J prefers to support  $\bar{x}_L$  to any opinion in the conservative range. Then, if  $\alpha_S > \frac{\bar{x}_L + \bar{x}_C}{2} + \frac{r-q}{2}$  it is true that S supports  $\bar{x}_C$  such that an equilibrium E1b is defined. If  $\frac{\bar{x}_L + \underline{x}_C}{2} + \frac{r-q}{2} < \alpha_S < \frac{\bar{x}_L + \bar{x}_C}{2}$  then CJ proposes the interior opinion  $2\alpha_S - \bar{x}_L - (r - q)$  which again defines and E1b equilibrium (CJ writes the opinion in his preferred range which is also the preferred range of S). Still in the scenario in which  $\alpha_J < \frac{\bar{x}_L + \underline{x}_C}{2}$  but this time,  $\frac{\bar{x}_L + \underline{x}_C}{2} < \alpha_S < \frac{\bar{x}_L + \underline{x}_C}{2} + \frac{r-q}{2}$ , CJ will not be able to convince S to support a proposal in the conservative range hence it will prefer to be himself who writes the opinion in the liberal range, that is  $x_{CJ}^* = \bar{x}_L$  which is supported only by J and defines an E2a equilibria. Finally if  $\alpha_J < \alpha_S < \frac{\bar{x}_L + \underline{x}_C}{2}$  then CJ knows that neither S or J will support any value in  $I_C$ . Hence if  $R - q > 0$  CJ will prefer to propose  $x_{CJ}^* = \bar{x}_L$  himself which will be supported by S and J (that defines equilibrium E2b). But if  $R - q < 0$  then CJ will propose any value in  $I_C$ , then S will propose  $x_S^* = \bar{x}_L$  and J will support S (which defines equilibrium E3).

Case 4 is much easier than case 3 because even when is not clear what is the preferred range for neither of the justices, we know that in  $I_C$  all the justices prefer  $\underline{x}_C$  and in  $I_L$  all the justices prefer  $\bar{x}_L$ . Then, we identify only 4 possible sub-cases depending on whether  $\{\alpha_J, \alpha_S, \alpha_{CJ}\}$  are larger or smaller than  $D/2$ . If  $\alpha_J > D/2$  then CJ proposes  $x_{CJ}^* = \underline{x}_C$  and all the justices support it (E1a). If  $\alpha_S > D/2 > \alpha_J$  then if  $r - q > (\underline{x}_C - \bar{x}_L)$  and CJ proposes  $x_{CJ}^* = \bar{x}_L$  to avoid that S is the justice who writes the opinion, S proposes  $x_S^* \in I_C$  and J supports CJ (E2a), but if  $r - q < (\underline{x}_C - \bar{x}_L)$  then CJ proposes  $x_{CJ}^* = \underline{x}_C$  and all the justices support it (E1b). If  $\alpha_{CJ} > D/2 > \alpha_S$  then if  $R - q > 0$  we have that CJ proposes  $x_{CJ}^* = \bar{x}_L$  and all the justices support it (E2b) but if  $R - q < 0$  then CJ proposes  $x_{CJ}^* \in I_C$ , S does not support it and instead proposes  $x_S^* = \bar{x}_L$  which is supported by J (E3). Finally if  $\alpha_{CJ} < D/2$  then CJ proposes  $x_{CJ}^* = \bar{x}_L$  and all the justices support it (E2a).



In Case 5 we know all justices preferred ranges. While for S and CJ it is  $I_C$ , for J it is  $I_L$ . Here CJ will be able to impose his preferred opinion  $x_{CJ}^* = \bar{x}_C$  an impose equilibrium E1b as long as S does not have stronger incentives to propose  $x_S^* = \bar{x}_L$  which happens if  $r - q > (\bar{x}_C - \bar{x}_L)$ . But we know that in that scenario the same CJ proposes  $x_{CJ}^* = \bar{x}_L$  which gets J support (E2a).

Case 6 has more variations than case 5 because we do not know S's preferred range. However the characterization of the possible solutions is not difficult and will centrally depend on the value of  $\alpha_S$ . If  $\alpha_S > \frac{L+D}{2} + \frac{r-q}{2}$  we know that S prefers to support  $x_{CJ}^* = \bar{x}_C$  than to propose  $x_S^* = \bar{x}_L$  and attract the support of J. Hence when  $\alpha_S > \frac{L+D}{2} + \frac{r-q}{2}$  the solution is in the form of E1b in which CJ proposes  $x_{CJ}^* = \bar{x}_C$  and the other two justices support it. When  $\alpha_S \in \left[ \frac{D}{2} + \frac{r-q}{2}, \frac{L+D}{2} + \frac{r-q}{2} \right]$  then CJ has the opportunity of convincing S of accepting his propose. S will do it up to the point of indifference which is defined by  $1 - (x^* - \alpha_S) = 1 - (\alpha_S - \bar{x}_L) + r - q$  or equivalently  $x^* = 2\alpha_S - \bar{x}_L - (r - q) \in [\underline{x}_C, \bar{x}_C]$ . J will have no other option but to accept  $x_{CJ}^* = 2\alpha_S - \bar{x}_L - (r - q)$  as S will not offer an alternative. This still defines an E1b equilibrium but with an interior solution. Instead when  $\alpha_S \in \left[ \frac{D}{2}, \frac{D}{2} + \frac{r-q}{2} \right]$  the solution is in the form of E2a in which CJ proposes  $x_{CJ}^* = \bar{x}_L$  and only J supports it (notice that for the interval to exist it has to be that  $R - q > r - q > 2\alpha_S - D$ ). Finally, if  $\alpha_S < \frac{D}{2}$  then J and S preferred range is  $I_L$  hence if  $R - q < 0$ , CJ will not try to prevent S from writing the opinion. CJ will propose something in the conservative range but S will always propose her own option  $x_S^* = \bar{x}_L$  which J will support (E3). Instead if  $R - q > 0$  then CJ will propose  $x_{CJ}^* = \bar{x}_L$  himself and defines an equilibrium E2b.

In case 7 we know that J's preferred range is  $I_L$  but we do not know which the preferred ranges for CJ and S are. Depending on the order relation between  $\{\alpha_S, \alpha_{CJ}\}$  and  $D/2$  we distinguish three scenarios. If  $\alpha_S > D/2$  then we differentiate situations in which S might want to propose her own opinion (when  $r - q > (\underline{x}_C - \bar{x}_L)$ ) from those in which that does not happens (when  $r - q < (\underline{x}_C - \bar{x}_L)$ ). In the first situation we retrieve E2a as we characterized in previous cases while in the second situation we keep E1b. If  $\alpha_{CJ} > \frac{D}{2} > \alpha_S$

then the decision of CJ to prevent S from writing the opinion will depend on whether  $R - q$  is larger or smaller than 0. In the case that  $R - q > 0$  then CJ will write the opinion (E2b) but otherwise then S will (E3). Finally, when  $\frac{D}{2} > \alpha_{CJ}$  we know that CJ will dominate the game by proposing  $x_{CJ}^* = \bar{x}_L$  which will be accepted by the other two justices (E1a).

Case 8 is straightforward after we notice that any CJ's proposal in  $I_C$  will be rejected by S. Instead S proposes an opinion inside  $I_L$  which is supported by J. Hence the only question is when do CJ want to propose an opinion in  $I_L$  (and generate an E2b equilibrium)? The answer is when  $R - q > \underline{x}_L - \bar{x}_L$  which is not always true because  $R - q$  can be negative. If  $R - q < \underline{x}_L - \bar{x}_L$  then the equilibrium is E3.

Case 9 is a close variation of case 8. If CJ's preferred range is  $I_L$  ( $\alpha_{CJ} < D/2$ ) then it is clear that CJ proposes  $x_{CJ}^* = \bar{x}_L$  which is supported by the other two justices (remember that S cannot propose an opinion in the same range in which CJ proposes). That defines equilibrium E1a. But if CJ's preferred range is  $I_C$  ( $\alpha_{CJ} > D/2$ ) then regardless what CJ proposes, the final opinion will be located inside  $I_L$ . As in case 8, when  $R - q > \underline{x}_L - \bar{x}_L$  the equilibrium is E2b but if  $R - q < \underline{x}_L - \bar{x}_L$  then the equilibrium is E3.

<b>Table 1a : Summary of Solutions (<math>\alpha_J &lt; \alpha_S &lt; \alpha_{CJ}</math>)</b>				
<b>Case</b>	<b>At t = 1</b>	<b>At t = 2</b>	<b>At t = 3</b>	<b>Eqm</b>
1	$x_{CJ}^* = \bar{x}_C$	S supports $x_{CJ}^*$	J supports $x_{CJ}^*$	E1a
2	2.1 If $\alpha_J > \frac{L+D-q}{2}$ then $x_{CJ}^* = \bar{x}_C$	S supports $x_{CJ}^*$	J supports $x_{CJ}^*$	E1a
	2.2 If $\alpha_J \in \left[\frac{D}{2}, \frac{L+D-q}{2}\right]$ and $r - q < (\bar{x}_C - \bar{x}_L)$ then $x_{CJ}^* = \bar{x}_C$	S supports $x_{CJ}^*$	J supports $x_{CJ}^*$	E1a
	2.3 If $\alpha_J \in \left[\frac{D}{2}, \frac{L+D-q}{2}\right]$ and $r - q > (\bar{x}_C - \bar{x}_L)$ then $x_{CJ}^* = 2\alpha_J - \bar{x}_L + q$	S supports $x_{CJ}^*$	J supports $x_{CJ}^*$	E1a
	2.4 If $\alpha_J < \frac{D}{2}$ and $r - q < (\bar{x}_C - \bar{x}_L)$ then $x_{CJ}^* = \bar{x}_C$	S supports $x_{CJ}^*$	J supports $x_{CJ}^*$	E1b

	2.5 If $\alpha_J < \frac{D}{2}$ and $r - q > (\bar{x}_C - \bar{x}_L)$ then $x_{CJ}^* = \bar{x}_L$	$S$ proposes $x_S^* \in I_C$	$J$ supports $x_{CJ}^*$	E2a
3	3.1 If $\alpha_J > \frac{D}{2}$ and $(\alpha_S > \frac{L+D}{2} + \frac{r-q}{2}$ or $\alpha_J > \frac{L+D}{2} - \frac{q}{2})$ then $x_{CJ}^* = \bar{x}_C$	$S$ supports $x_{CJ}^*$	$J$ supports $x_{CJ}^*$	E1a
	3.2 If $\alpha_J > \frac{D}{2}$ and $(\alpha_S < \frac{L+D}{2} + \frac{r-q}{2}$ and $\alpha_J < \frac{L+D}{2} - \frac{q}{2})$ then $x_{CJ}^* = \max\{2\alpha_S - \bar{x}_L - (r - q), 2\alpha_J - \bar{x}_L + q\}$	$S$ supports $x_{CJ}^*$	$J$ supports $x_{CJ}^*$	E1a
	3.3 If $\alpha_J < \frac{D}{2} < \alpha_S$ and $(\alpha_S > \frac{L+D}{2} + \frac{r-q}{2})$ then $x_{CJ}^* = \bar{x}_C$	$S$ supports $x_{CJ}^*$	$J$ supports $x_{CJ}^*$	E1b
	3.4 If $\alpha_J < \frac{D}{2} < \alpha_S$ and $\alpha_S \in [\frac{D}{2} + \frac{r-q}{2}, \frac{D+L}{2} + \frac{r-q}{2}]$ then $x_{CJ}^* = 2\alpha_S - \bar{x}_L - (r - q)$	$S$ supports $x_{CJ}^*$	$J$ supports $x_{CJ}^*$	E1b
	3.5 If $\alpha_J < \frac{D}{2} < \alpha_S < \frac{D}{2} + \frac{r-q}{2}$ then $x_{CJ}^* = \bar{x}_L$	$S$ proposes $x_S^* \in I_C$	$J$ supports $x_{CJ}^*$	E2a
	3.6 If $\alpha_J < \alpha_S < \frac{D}{2}$ and $R - q > 0$ then $x_{CJ}^* = \bar{x}_L$	$S$ supports $x_{CJ}^*$	$J$ supports $x_{CJ}^*$	E2b
	3.7 If $\alpha_J < \alpha_S < \frac{D}{2}$ and $R - q < 0$ then $x_{CJ}^* \in I_C$	$S$ proposes $x_S^* = \bar{x}_L$	$J$ supports $x_S^*$	E3
4	4.1 If $\alpha_J > D/2$ then $x_{CJ}^* = \underline{x}_C$	$S$ supports $x_{CJ}^*$	$J$ supports $x_{CJ}^*$	E1a
	4.2 If $\alpha_J < D/2 < \alpha_S$ and $r - q > (\underline{x}_C - \bar{x}_L)$ then $x_{CJ}^* = \bar{x}_L$	$S$ proposes $x_S^* \in I_C$	$J$ supports $x_{CJ}^*$	E2a
	4.3 If $\alpha_J < D/2 < \alpha_S$ and $r - q < (\underline{x}_C - \bar{x}_L)$ then $x_{CJ}^* = \underline{x}_C$	$S$ supports $x_{CJ}^*$	$J$ supports $x_{CJ}^*$	E1b
	4.4 If $\alpha_S < D/2 < \alpha_{CJ}$ and $R - q > 0$ then $x_{CJ}^* = \bar{x}_L$	$S$ supports $x_{CJ}^*$	$J$ supports $x_{CJ}^*$	E2b

	4.5 If $\alpha_S < D/2 < \alpha_{CJ}$ and $R - q < 0$ then $x_{CJ}^* \in I_C$	$S$ proposes $x_S^* = \bar{x}_L$	$J$ supports $x_S^*$	E3
	4.6 If $\alpha_{CJ} < D/2$ then $x_{CJ}^* = \bar{x}_L$	$S$ supports $x_{CJ}^*$	$J$ supports $x_{CJ}^*$	E1a
5	5.1 If $r - q > (\bar{x}_C - \bar{x}_L)$ then $x_{CJ}^* = \bar{x}_L$	$S$ proposes $x_S^* \in I_C$	$J$ supports $x_{CJ}^*$	E2a
	5.2 Otherwise $x_{CJ}^* = \bar{x}_C$	$S$ supports $x_{CJ}^*$	$J$ supports $x_{CJ}^*$	E1b
6	6.1 If $\alpha_S > \frac{L+D}{2} + \frac{r-q}{2}$ then $x_{CJ}^* = \bar{x}_C$	$S$ supports $x_{CJ}^*$	$J$ supports $x_{CJ}^*$	E1b
	6.2 If $\alpha_S \in \left[\frac{D}{2} + \frac{r-q}{2}, \frac{L+D}{2} + \frac{r-q}{2}\right]$ then $x_{CJ}^* = 2\alpha_S - \bar{x}_L - (r - q)$	$S$ supports $x_{CJ}^*$	$J$ supports $x_{CJ}^*$	E1b
	6.3 If $\alpha_S \in \left[\frac{D}{2}, \frac{D}{2} + \frac{r-q}{2}\right]$ then $x_{CJ}^* = \bar{x}_L$	$S$ proposes $x_S^* \in I_C$	$J$ supports $x_{CJ}^*$	E2a
	6.4 If $\alpha_S < D/2$ and $R - q > 0$ then $x_{CJ}^* = \bar{x}_L$	$S$ supports $x_{CJ}^*$	$J$ supports $x_{CJ}^*$	E2b
	6.5 If $\alpha_S < D/2$ and $R - q < 0$ then $x_{CJ}^* \in I_C$	$S$ proposes $x_S^* = \bar{x}_L$	$J$ supports $x_S^*$	E3
7	7.1 If $\alpha_S > \frac{D}{2}$ and $r - q < (\underline{x}_C - \bar{x}_L)$ then $x_{CJ}^* = \underline{x}_C$	$S$ supports $x_{CJ}^*$	$J$ supports $x_{CJ}^*$	E1b
	7.2 If $\alpha_S > \frac{D}{2}$ and $r - q > (\underline{x}_C - \bar{x}_L)$ then $x_{CJ}^* = \bar{x}_L$	$S$ proposes $x_S^* \in I_C$	$J$ supports $x_{CJ}^*$	E2a
	7.3 If $\alpha_{CJ} > \frac{D}{2} > \alpha_S$ and $R - q > 0$ then $x_{CJ}^* = \bar{x}_L$	$S$ supports $x_{CJ}^*$	$J$ supports $x_{CJ}^*$	E2b
	7.4 If $\alpha_{CJ} > \frac{D}{2} > \alpha_S$ and $R - q < 0$ then $x_{CJ}^* \in I_C$	$S$ proposes $x_S^* = \bar{x}_L$	$J$ supports $x_S^*$	E3
	7.5 If $\alpha_{CJ} < D/2$ then $x_{CJ}^* = \bar{x}_L$	$S$ supports $x_{CJ}^*$	$J$ supports $x_{CJ}^*$	E1a
8	8.1 If $R - q > \underline{x}_L - \bar{x}_L$ then $x_{CJ}^* = \bar{x}_L$	$S$ supports $x_{CJ}^*$	$J$ supports $x_{CJ}^*$	E2b
	8.2 If $R - q < \underline{x}_L - \bar{x}_L$ then $x_{CJ}^* \in I_C$	$S$ proposes $x_S^* = \underline{x}_L$	$J$ supports $x_S^*$	E3
9	9.1 If $\alpha_{CJ} < \frac{D}{2}$ then $x_{CJ}^* = \bar{x}_L$	$S$ supports $x_{CJ}^*$	$J$ supports $x_{CJ}^*$	E1a

	9.2 If $\alpha_{CJ} > \frac{D}{2}$ and $R - q > \underline{x}_L - \bar{x}_L$ then $x_{CJ}^* = \bar{x}_L$	S supports $x_{CJ}^*$	J supports $x_{CJ}^*$	E2b
	9.3 If $R - q < \underline{x}_L - \bar{x}_L$ then $x_{CJ}^* \in I_C$	S proposes $x_S^* = \underline{x}_L$	J supports $x_S^*$	E3
10	$x_{CJ}^* = \underline{x}_L$	S supports $x_{CJ}^*$	J supports $x_{CJ}^*$	E1a

Now we move to discuss scenario II in which CJ and not S is the median of the Court represented by figure 3b ( $\alpha_J < \alpha_{CJ} < \alpha_S$ ). As we will see, many cases are as before (figure 3a) but we notice some important differences. First, equilibria of the type E3, do not take place anymore. The reason is that for that equilibrium to hold, it must be that in some circumstances the incentives of J and S are aligned in a way that contrapose the interests of CJ. For example, if  $\alpha_J < I_L < \alpha_S < I_C < \alpha_{CJ}$  then if S is close enough to the liberal range such that she will be interested in proposing an opinion that will be supported by J and the utility that CJ gets because of being the opinion writing does not compensate the disutility for not voting within his preferred range  $I_C$  then CJ will not propose an opinion in  $I_L$  and let S dominate the game (equilibrium E3). But if we switch the positions of CJ and S, as it is happening in figure 1b relative to figure 1a, then S will never be able to propose an opinion in the liberal range without CJ first having anticipated that an offered that opinion himself first (equilibrium E2). That same logic repeats in many sub-cases within figure 1b and ergo implies that E3 does not take place over there. Second, equilibrium E1c which did not exist under scenario I, does appear now. The reason is direct. Under scenario I, justice S is always located between CJ and J, hence it cannot be that CJ and J have the same preferred range and different from S. That is not true under scenario II because now the median is CJ and ergo there will be a number of situations in which CJ and J will be aligned between them but not with S. Third, solutions tend to be a little simpler because there are many situations in which it is not feasible for S to attract the vote of J.

Evidently cases 1 and 10 are exactly as before. Case 2 is also the same because although S gets lower pay-offs than in case 2 of figure 3a, what dominates the equilibrium are the incentives of J to support an opinion in  $I_L$  or in  $I_C$ . In the first case (which takes place when  $\alpha_J < \frac{L+D-q}{2}$ ), S would be tempted to propose  $\bar{x}_L$  if and only if  $r - q > (\bar{x}_C - \bar{x}_L)$  but if that

holds then  $R - q > (\bar{x}_C - \bar{x}_L)$  does as well. In addition, sometimes  $(\alpha_J \in [\frac{D}{2}, \frac{L+D-q}{2}])$  CJ can do better than just offering  $\bar{x}_L$  and offers an interior point in  $I_C$ . We retrieve the five subcases from table 1a.

Case 3 is different than the analysis in figure 3a because now CJ's preferred range is unknown. That said, the possible equilibria are very clean and we distinguish three main scenarios. The simplest is to see what happens when  $\alpha_{CJ} < D/2$ . Because of Lemma 1 we know that not only  $I_L$  is J and CJ preferred range but also they are closer to  $\bar{x}_L$  than to  $\underline{x}_C$ . Hence CJ proposes  $x_{CJ}^* = \bar{x}_L$ , S does not support it but J does, defining an E1c equilibrium. Instead if  $\alpha_{CJ} > D/2$  then we know again from Lemma 1 that not only  $I_C$  is CJ preferred range but also he is closer to  $\underline{x}_C$  than to  $\bar{x}_L$ . Hence, if  $\alpha_J > D/2$  then CJ offers  $x_{CJ}^* = \underline{x}_C$  and all the justices support it (E1a). But if  $\alpha_J < D/2$  then there is a chance, when  $r - q$  is large enough, that S will propose  $x_S^* = \bar{x}_L$  which would be supported by J. More specifically, if  $r - q < \underline{x}_C - \bar{x}_L$  then CJ offers  $x_{CJ}^* = \underline{x}_C$  and all the justices follow it (E1b). But if  $r - q > \bar{x}_C - \bar{x}_L$  then CJ has to offer  $x_{CJ}^* = \bar{x}_L$  or S will do it herself. Hence, in this E2a, S proposes any opinion in  $I_C$  but J supports CJ. Finally, if  $r - q \in [\underline{x}_C - \bar{x}_L, \bar{x}_C - \bar{x}_L]$  then CJ can propose an opinion that will make S indifferent. That is, CJ proposes  $r - q + \bar{x}_L$ . In that case S and J support it. A point to stress here is that now the equilibrium in which S rejects CJ proposal and instead proposes her own opinion which is followed by J (E3) does not hold anymore. The reason is that the ideology of CJ is between the ideologies of J and S which prevents J and S forming a coalition against the Chief Justice.

Because the order positions of S and CJ are reverted, case 4 in table 1b presents a slight variation from the same results in table 1a. Once more equilibrium E3 disappears and equilibrium E1c is present.

While it is direct to check that case 5 is as in table 1a, case 6 is involved in figure 3b as well as in figure 3a. It is enough to see that if  $\alpha_{CJ} < D/2$  then CJ gets J support by offering his preferred opinion  $x_{CJ}^* = \bar{x}_L$  (E1c). Instead if  $\alpha_{CJ} > D/2$ , CJ would like to always propose  $x_{CJ}^* = \underline{x}_C$  but if  $r - q > \underline{x}_C - \bar{x}_L$  then S would deviate by offering  $x_S^* = \bar{x}_L$  which will be supported by J. As CJ anticipates it, he himself will sometimes offer opinions that will convince S not to propose alternative opinions. In more detail, when  $r - q > \bar{x}_C - \bar{x}_L$  then CJ

is forced to offer  $x_{CJ}^* = \bar{x}_L$  which is supported by J although not by S (E2a). When  $r - q < \underline{x}_C - \bar{x}_L$  then CJ offers  $x_{CJ}^* = \underline{x}_C$  which is supported by all justices (E1b). And when  $r - q \in [\underline{x}_C - \bar{x}_L, \bar{x}_C - \bar{x}_L]$  then CJ proposes  $r - q + \bar{x}_L$  which makes S support it (instead of proposing  $\bar{x}_L$ ) and ergo J also supports it. Once more the E3 equilibrium cannot hold.

In a certain way, case 7 is a simplification of case 6, because still is true that if  $\alpha_{CJ} < D/2$  then CJ gets J support by offering opinion  $x_{CJ}^* = \bar{x}_L$  (E1c). And if  $\alpha_{CJ} > D/2$  now simply  $x_{CJ}^* = \underline{x}_C$  which gets S support if  $r - q < \underline{x}_C - \bar{x}_L$  (E1b) but  $x_{CJ}^* = \bar{x}_L$  which gets J support if  $r - q > \underline{x}_C - \bar{x}_L$  (E2a).

Cases 8 and 9 both only hold the E1c equilibrium in which CJ offers  $x_{CJ}^* = \underline{x}_L$  and J supports it. Instead S supports CJ when her preferred range is  $I_C$  but proposes any opinion in  $I_C$  if that is her preferred range so it can save q.

Table 1b next, summarizes cases only when results are different from table 1a

<b>Table 1b : Summary of Solutions (<math>\alpha_J &lt; \alpha_{CJ} &lt; \alpha_S</math>)</b>				
<b>Case</b>	<b>At t = 1</b>	<b>At t = 2</b>	<b>At t = 3</b>	<b>Eqm</b>
3	3.1 If $\alpha_{CJ} < D/2$ then $x_{CJ}^* = \bar{x}_L$	S proposes $x_S^* \in I_C$	J supports $x_{CJ}^*$	E1c
	3.2 If $\alpha_J > D/2$ then $x_{CJ}^* = \underline{x}_C$	S supports $x_{CJ}^*$	J supports $x_{CJ}^*$	E1a
	3.3 If $\alpha_{CJ} > \frac{D}{2} > \alpha_J$ and $r - q < \underline{x}_C - \bar{x}_L$ then $x_{CJ}^* = \underline{x}_C$	S supports $x_{CJ}^*$	J supports $x_{CJ}^*$	E1b
	3.4 If $\alpha_{CJ} > \frac{D}{2} > \alpha_J$ and $r - q \in [\underline{x}_C - \bar{x}_L, \bar{x}_C - \bar{x}_L]$ then $x_{CJ}^* = \bar{x}_L + r - q$	S supports $x_{CJ}^*$	J supports $x_{CJ}^*$	E1b
	3.5 If $\alpha_{CJ} > \frac{D}{2} > \alpha_J$ and $r - q > \bar{x}_C - \bar{x}_L$ then $x_{CJ}^* = \bar{x}_L$	S proposes $x_S^* \in I_C$	J supports $x_{CJ}^*$	E2a
4	4.1 If $\alpha_J > \frac{D}{2}$ then $x_{CJ}^* = \underline{x}_C$	S supports $x_{CJ}^*$	J supports $x_{CJ}^*$	E1a

	4.2 If $\alpha_J < \frac{D}{2} < \alpha_{CJ}$ and $r - q > (\underline{x}_C - \bar{x}_L)$ then $x_{CJ}^* = \bar{x}_L$	$S$ proposes $x_S^* \in I_C$	$J$ supports $x_{CJ}^*$	E2a
	4.3 If $\alpha_J < \frac{D}{2} < \alpha_{CJ}$ and $r - q < (\underline{x}_C - \bar{x}_L)$ then $x_{CJ}^* = \underline{x}_C$	$S$ supports $x_{CJ}^*$	$J$ supports $x_{CJ}^*$	E1b
	4.4 If $\alpha_{CJ} < \frac{D}{2} < \alpha_S$ then $x_{CJ}^* = \bar{x}_L$	$S$ proposes $x_S^* \in I_C$	$J$ supports $x_{CJ}^*$	E1c
	4.5 If $\alpha_S < \frac{D}{2}$ then $x_{CJ}^* = \bar{x}_L$	$S$ supports $x_{CJ}^*$	$J$ supports $x_{CJ}^*$	E1a
6	6.1 If $\alpha_{CJ} < \frac{D}{2}$ then $x_{CJ}^* = \bar{x}_L$	$S$ proposes $x_S^* \in I_C$	$J$ supports $x_{CJ}^*$	E1c
	6.2 If $\alpha_{CJ} > \frac{D}{2}$ and $r - q > (\bar{x}_C - \bar{x}_L)$ then $x_{CJ}^* = \bar{x}_L$	$S$ proposes $x_S^* \in I_C$	$J$ supports $x_{CJ}^*$	E2a
	6.3 If $\alpha_{CJ} > \frac{D}{2}$ and $r - q \in [(\underline{x}_C - \bar{x}_L), (\bar{x}_C - \bar{x}_L)]$ then $x_{CJ}^* = r - q + \bar{x}_L$	$S$ supports $x_{CJ}^*$	$J$ supports $x_{CJ}^*$	E1b
	6.4 If $\alpha_{CJ} > \frac{D}{2}$ and $r - q < (\underline{x}_C - \bar{x}_L)$ then $x_{CJ}^* = \underline{x}_C$	$S$ supports $x_{CJ}^*$	$J$ supports $x_{CJ}^*$	E1b
7	7.1 If $\alpha_S < \frac{D}{2}$ then $x_{CJ}^* = \bar{x}_L$	$S$ supports $x_{CJ}^*$	$J$ supports $x_{CJ}^*$	E1a
	7.2 If $\alpha_{CJ} < \frac{D}{2} < \alpha_S$ then $x_{CJ}^* = \bar{x}_L$	$S$ proposes $x_S^* \in I_C$	$J$ supports $x_{CJ}^*$	E1c
	7.3 If $\alpha_{CJ} > \frac{D}{2}$ and $r - q > (\underline{x}_C - \bar{x}_L)$ then $x_{CJ}^* = \bar{x}_L$	$S$ proposes $x_S^* \in I_C$	$J$ supports $x_{CJ}^*$	E2a
	7.4 If $\alpha_{CJ} > \frac{D}{2}$ and $r - q < (\underline{x}_C - \bar{x}_L)$ then $x_{CJ}^* = \underline{x}_C$	$S$ supports $x_{CJ}^*$	$J$ supports $x_{CJ}^*$	E1b
8	$x_{CJ}^* = \underline{x}_L$	$S$ proposes $x_S^* \in I_C$	$J$ supports $x_{CJ}^*$	E1c



9	9.1 If $\alpha_S < \frac{D}{2}$ then $x_{CJ}^* = \underline{x}_L$	S supports $x_{CJ}^*$	J supports $x_{CJ}^*$	E1a
	9.2 If $\alpha_S > \frac{D}{2}$ then $x_{CJ}^* = \underline{x}_L$	S proposes $x_S^* \in I_C$	J supports $x_{CJ}^*$	E1c

Finally, we analyze scenario III in which J is the median of the Court represented by figure 3c ( $\alpha_{CJ} < \alpha_J < \alpha_S$ ). Three novelties take place here. First, under E3, S will not only propose corner opinions but she will propose internal opinions. Second, equilibria E1b and E2a are not possible because when J is the moderate justice then it cannot be that CJ and S have the same preferred range which is not J's preferred range. Third, solutions reflect an open competition between CJ and S to attract J's support. That is captured by the larger number of cases, compared to scenario I, with not trivial solutions.

Table 1c presents the solutions when those are different than in table 1a. As in the two previous scenarios, the solutions in cases 1 and 10 are the same.

By its side, solution of case 2 is considerably different than case 2 in table 1a. As J's preferred range is  $I_C$  then whenever CJ's preferred range is the same ( $\alpha_{CJ} \geq \frac{D}{2}$ ) then the solution has to be  $x_{CJ}^* = \underline{x}_C$  and the other two justices support it (E1a). But if CJ's preferred range is  $I_L$  ( $\alpha_{CJ} < \frac{D}{2}$ ) then if CJ proposes an opinion in that same range it will give the option to S to propose and write an opinion in the conservative range (E2b). CJ will avoid it if  $R - q > \underline{x}_C - \bar{x}_C$  otherwise S writes the opinion (E3).

Case 3 is the first case in which S could generate an equilibrium E3 in which the opinion is not a corner solution but an interior point. According to lemma 1 we have to distinguish several cases. If CJ and J preferred range is  $I_L$  ( $\alpha_J < \frac{D}{2}$ ) then CJ proposes  $x_{CJ}^* = \bar{x}_L$ , J supports it and S proposes something in the conservative range (E1c). If CJ preferred range is  $I_L$  ( $\alpha_{CJ} < \frac{D}{2}$ ) but for J is  $I_C$  and  $\alpha_J > \frac{L+D}{2}$  then we have to distinguish whether  $R - q > \underline{x}_C - \bar{x}_C$ . If  $R - q < \underline{x}_C - \bar{x}_C$  then CJ prefers not to offer an opinion inside  $I_C$ . That is, S proposes  $x_S^* = \bar{x}_C$  and J supports it (E3). But if  $R - q > \underline{x}_C - \bar{x}_C$  then CJ offers  $x_{CJ}^* = \underline{x}_C$  which is accepted by all justices (E2b). The most interesting subcase happens when CJ

preferred range is  $I_L$  ( $\alpha_{CJ} < \frac{D}{2}$ ) but for J is  $I_C$  and  $\alpha_J \in [\frac{D}{2}, \frac{L+D}{2}]$ . In that subcase, because of lemma 1, J prefers to support  $\bar{x}_L$  than  $\bar{x}_C$  hence if  $R - q > \underline{x}_C - \bar{x}_C$  then once more CJ offers  $x_{CJ}^* = \underline{x}_C$  which is accepted by all justices (E2b) but if  $R - q < \underline{x}_C - \bar{x}_C$  (penalty is much larger than the reputational disutility) then not only CJ does not write the opinion but in addition S offers an opinion that makes J indifferent from accepting  $x_{CJ}^* = \bar{x}_L$  which is  $2\alpha_J - \bar{x}_L + q$ . To see that indeed CJ would prefer to offer  $x_{CJ}^* = \bar{x}_L$  instead to  $x_{CJ}^* = \underline{x}_C$  notice that under the first he gets  $1 - (x_S^* - \alpha_{CJ})$  which is larger than  $1 - (\underline{x}_C - \alpha_{CJ}) + (R - q)$  because  $R - q < \underline{x}_C - \bar{x}_C < \underline{x}_C - x_S^*$  with  $x_S^* \in I_C$ .<sup>60</sup> Evidently when  $\alpha_{CJ} > \frac{D}{2}$  then the only solution is  $x_{CJ}^* = \underline{x}_C$  which is supported by all justices (E1a).

The solution of case 4 preserves the logic of the solutions presented in tables 1a and 1b but we have to adjust the possibilities according to the order relation among  $\{\alpha_{CJ}, \alpha_J, \alpha_S\}$ .

Case 5 is simple because then the final opinion will be written by S in the conservative range if CJ proposes an opinion in the liberal range. The only reason why CJ could be interested in proposing something in the liberal range is when  $R - q < \underline{x}_C - \bar{x}_C$  which defines an E3 equilibrium. When  $R - q > \underline{x}_C - \bar{x}_C$  then  $x_{CJ}^* = \underline{x}_C$  which is supported by all justices and defines equilibrium E1c.

Case 6 has some similarities with case 3. Once more we have to distinguish the subcases depending on the ideology of  $\alpha_J$ . If  $\alpha_J < (D - L)/2$  then J will support any opinion in liberal range, hence  $x_{CJ}^* = \underline{x}_L$  (E1c). In the same way if  $\alpha_J \in [(D - L)/2, D/2]$  such that  $I_L$  is J's preferred range but he will be closer to  $\underline{x}_C$  than to  $\underline{x}_L$  then CJ will offer J's point of indifference for J with respect to S's offer. That is  $x_{CJ}^* = 2\alpha_S - \underline{x}_C - q$  and once more the equilibrium is E1c. On the other side, if  $\alpha_J \in [D/2, (D + L)/2]$  then CJ will propose a viable alternative to S proposal if and only if  $R - q > \underline{x}_C - \bar{x}_C$ . In that case  $x_{CJ}^* = \underline{x}_C$  and both justices support it (E2b). But if  $R - q < \underline{x}_C - \bar{x}_C$  then S will offer  $\underline{x}_C - (R - q)$  in order to

---

<sup>60</sup> Strictly speaking this is not a NE because if CJ offers  $x_{CJ}^* = \bar{x}_L$  then due to the "seniority assumption under indifference" J will support CJ. We can avoid all the complications if we assume that S indeed offers the supremum in the set  $[\underline{x}_C, 2\alpha_J - \bar{x}_L + q]$ . Ultimately what matters is that S has many alternatives to offer J such that J will prefer them to  $x_{CJ}^* = \bar{x}_L$  and the payoff of S will be higher than what she gets if she supports CJ.

make CJ indifferent between offering  $\underline{x}_C$ , offering any other opinion in  $I_L$  or offer no opinion (E3). Finally, if  $\alpha_J > (D + L)/2$  then J is so conservative that he supports S offer  $x_S^* = \bar{x}_C$  which defines an E3 equilibrium. The only exception is when  $R - q > \underline{x}_C - \bar{x}_C$  which induces CJ to offer  $x_{CJ}^* = \underline{x}_C$  which is supported by J and S (E2b).

Case 7 is a simplified version of case 6 in which we do not need to distinguish whether J will be close or very close to the conservative range because S's optimal proposal is always  $\underline{x}_C$ . Finally, the solutions of cases 8 and 9 are identical in that both define an E1c equilibrium in which CJ proposes  $\underline{x}_L$  and J always support it. The only difference between the two subcases is that in subcase 9 we do not know S's preferred range. Depending on that it could be that she will prefer to support CJ or offer her own alternative opinion.

Summarizing: E1a takes place in subcases 1, 2.1-.3, 3.1-.2, 4.1, 4.6, 7.5, 9 and 10 of table 1a. Also in 1, 2.1-.3, 3.2, 4.1, 4.5, 7.1, 9.1 and 10 of table 1b and 1, 2.1, 3.6, 4.1, 4.5, 7.1, 7.3, 9.1 and 10 of table 1c. E1b takes place in subcases 2.4, 3.3-.4, 4.3, 6.1-.2, 7.1 of table 1a. Also in 2.4, 3.3-.4, 4.3, 6.3-.4, 7.4 of table 1b and never in table 1c. E1c never takes place in table 1c. In table 1b it takes place for subcases 3.1, 4.4, 6.1, 7.2, 8.1, 9.2. Also in 3.1, 4.4, 5.2, 6.1-.2, 7.2, 8.1 and 9.2 of table 1c. By its side, E2a takes place in subcases 2.5, 3.5, 4.2, 5.1, 6.3, 7.2 of table 1a. Also in 3.5, 4.2, 6.2 and 7.3 of table 1b and never in table 1c. E2b takes place in 3.6, 4.4, 6.4, 7.3, 9.2 of table 1a. Never in table 1b and in 2.2, 3.3, 3.5, 6.3, 6.5 of table 1c. Finally E3 happens only in 3.7, 4.5, 6.5, 7.4, 8.2 and 9.3 of table 1a. Also in 2.3, 3.2, 3.4, 4.3, 5.1, 6.4, 6.6 and 7.6 of table 1c. **End of Proof.**

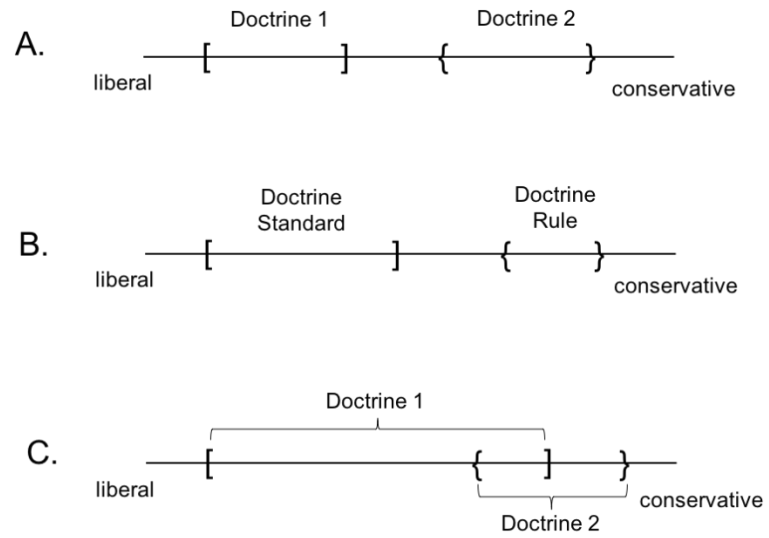
<b>Table 1c : Summary of Solutions (<math>\alpha_{CJ} &lt; \alpha_J &lt; \alpha_S</math>)</b>				
<b>Case</b>	<b>At t = 1</b>	<b>At t = 2</b>	<b>At t = 3</b>	<b>Eqm</b>
2	2.1 If $\alpha_{CJ} > D/2$ then $x_{CJ}^* = \underline{x}_C$	S supports $x_{CJ}^*$	J supports $x_{CJ}^*$	E1a
	2.2 If $\alpha_{CJ} < D/2$ and $R - q > \underline{x}_C - \bar{x}_C$ then $x_{CJ}^* = \underline{x}_C$	S supports $x_{CJ}^*$	J supports $x_{CJ}^*$	E2b
	2.3 If $\alpha_{CJ} < D/2$ and $R - q < \underline{x}_C - \bar{x}_C$ then $x_{CJ}^* \in I_L$	S proposes $x_S^* = \bar{x}_C$	J supports $x_S^*$	E3

3	3.1 If $\alpha_J < \frac{D}{2}$ then $x_{CJ}^* = \bar{x}_L$	$S$ proposes $x_S^* \in I_C$	$J$ supports $x_{CJ}^*$	E1c
	3.2 If $\alpha_{CJ} < \frac{D}{2}$ and $\alpha_J > \frac{L+D}{2}$ and $R - q < \underline{x}_C - \bar{x}_C$ then $x_{CJ}^* \in I_L$	$S$ proposes $x_S^* = \bar{x}_C$	$J$ supports $x_S^*$	E3
	3.3 If $\alpha_{CJ} < \frac{D}{2}$ and $\alpha_J > \frac{L+D}{2}$ and $R - q > \underline{x}_C - \bar{x}_C$ then $x_{CJ}^* = \underline{x}_C$	$S$ supports $x_{CJ}^*$	$J$ supports $x_{CJ}^*$	E2b
	3.4 If $\alpha_{CJ} < \frac{D}{2}$ and $\alpha_J \in [\frac{D}{2}, \frac{L+D}{2}]$ and $R - q < \underline{x}_C - \bar{x}_C$ then $x_{CJ}^* \in I_L$	$S$ proposes $x_S^* = \underline{x}_C - (R - q)$	$J$ supports $x_S^*$	E3
	3.5 If $\alpha_{CJ} < \frac{D}{2}$ and $\alpha_J \in [\frac{D}{2}, \frac{L+D}{2}]$ and $R - q > \underline{x}_C - \bar{x}_C$ then $x_{CJ}^* = \underline{x}_C$	$S$ supports $x_{CJ}^*$	$J$ supports $x_{CJ}^*$	E2b
	3.6 If $\alpha_{CJ} > \frac{D}{2}$ then $x_{CJ}^* = \underline{x}_C$	$S$ supports $x_{CJ}^*$	$J$ supports $x_{CJ}^*$	E1a
4	4.1 If $\alpha_{CJ} > D/2$ then $x_{CJ}^* = \underline{x}_C$	$S$ supports $x_{CJ}^*$	$J$ supports $x_{CJ}^*$	E1a
	4.2 If $\alpha_{CJ} < D/2 < \alpha_J$ and $R - q > 0$ then $x_{CJ}^* = \underline{x}_C$	$S$ supports $x_{CJ}^*$	$J$ supports $x_{CJ}^*$	E2b
	4.3 If $\alpha_{CJ} < D/2 < \alpha_J$ and $R - q < 0$ then $x_{CJ}^* \in I_L$	$S$ proposes $x_S^* = \underline{x}_C$	$J$ supports $x_S^*$	E3
	4.4 If $\alpha_J < D/2 < \alpha_S$ then $x_{CJ}^* = \bar{x}_L$	$S$ proposes $x_S^* \in I_C$	$J$ supports $x_{CJ}^*$	E1c
	4.5 If $\alpha_S < \frac{D}{2}$ then $x_{CJ}^* = \bar{x}_L$	$S$ supports $x_{CJ}^*$	$J$ supports $x_{CJ}^*$	E1a
5	5.1 If $R - q < \underline{x}_C - \bar{x}_C$ then $x_{CJ}^* \in I_L$	$S$ proposes $x_S^* = \bar{x}_C$	$J$ supports $x_S^*$	E3
	5.2 Otherwise $x_{CJ}^* = \underline{x}_C$	$S$ supports $x_{CJ}^*$	$J$ supports $x_{CJ}^*$	E1c
6	6.1 If $\alpha_J < (D - L)/2$ then $x_{CJ}^* = \underline{x}_L$	$S$ proposes $x_S^* \in I_C$	$J$ supports $x_{CJ}^*$	E1c

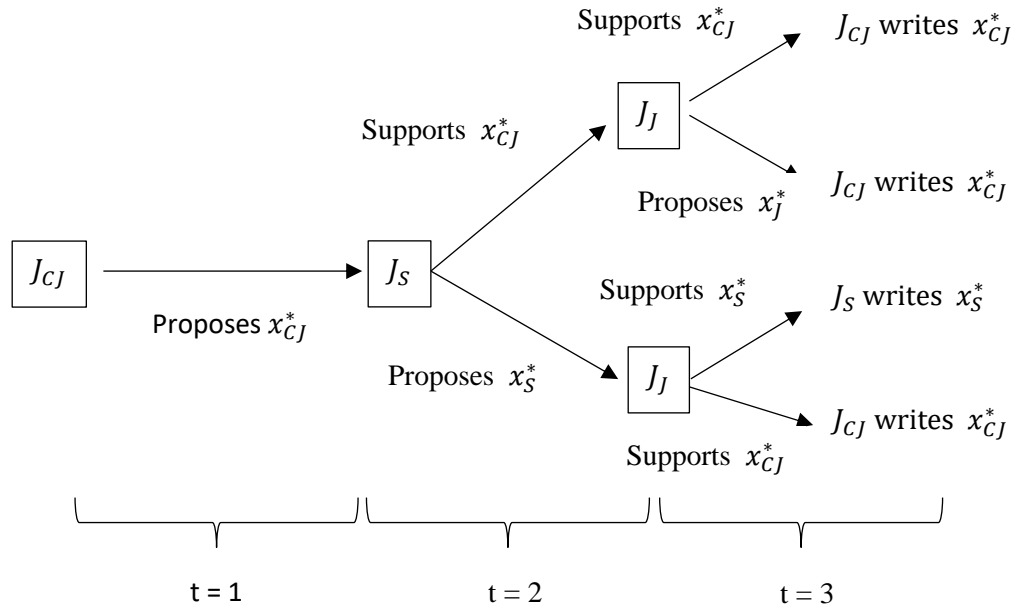
	6.2 If $\alpha_J \in \left[\frac{D-L}{2}, \frac{D}{2}\right]$ then $x_{CJ}^* = 2\alpha_J - \underline{x}_C - q$	$S$ proposes $x_S^* \in I_C$	$J$ supports $x_{CJ}^*$	E1c
	6.3 If $\alpha_J \in \left[\frac{D}{2}, \frac{L+D}{2}\right]$ and $R - q > \underline{x}_C - \bar{x}_C$ then $x_{CJ}^* = \underline{x}_C$	$S$ supports $x_{CJ}^*$	$J$ supports $x_{CJ}^*$	E2b
	6.4 If $\alpha_J \in \left[\frac{D}{2}, \frac{L+D}{2}\right]$ and $R - q < \underline{x}_C - \bar{x}_C$ then $x_S^* \in I_L$	$S$ proposes $x_S^* = \underline{x}_C - (R - q)$	$J$ supports $x_S^*$	E3
	6.5 If $\alpha_J > (L + D)/2$ and $R - q > \underline{x}_C - \bar{x}_C$ then $x_{CJ}^* = \underline{x}_C$	$S$ supports $x_{CJ}^*$	$J$ supports $x_S^*$	E2b
	6.6 If $\alpha_J > (L + D)/2$ and $R - q < \underline{x}_C - \bar{x}_C$ then $x_{CJ}^* \in I_L$	$S$ proposes $x_S^* = \bar{x}_C$	$J$ supports $x_S^*$	E3
7	7.1 If $\alpha_J < \frac{(D-L)}{2} + \frac{q}{2}$ and $\alpha_S < \frac{D}{2}$ then $x_{CJ}^* = \underline{x}_L$	$S$ supports $x_{CJ}^*$	$J$ supports $x_{CJ}^*$	E1a
	7.2 If $\alpha_J < \frac{(D-L)}{2} + \frac{q}{2} < \frac{D}{2} < \alpha_S$ then $x_{CJ}^* = \underline{x}_L$	$S$ proposes $x_S^* \in I_C$	$J$ supports $x_{CJ}^*$	E1c
	7.3 If $\alpha_J \in \left[\frac{D-L}{2} + \frac{q}{2}, \frac{D}{2}\right]$ and $\alpha_S < \frac{D}{2}$ then $x_{CJ}^* = 2\alpha_J - \underline{x}_C - q$	$S$ supports $x_{CJ}^*$	$J$ supports $x_{CJ}^*$	E1a
	7.4 If $\alpha_J \in \left[\frac{D-L}{2} + \frac{q}{2}, \frac{D}{2}\right]$ and $\alpha_S > \frac{D}{2}$ then $x_{CJ}^* = 2\alpha_J - \underline{x}_C - q$	$S$ proposes $x_S^* \in I_C$	$J$ supports $x_{CJ}^*$	E1c
	7.5 If $\alpha_J > \frac{D}{2}$ and $R - q > 0$ then $x_{CJ}^* = \underline{x}_C$	$S$ supports $x_{CJ}^*$	$J$ supports $x_{CJ}^*$	E2b
	7.6 If $\alpha_J > \frac{D}{2}$ and $R - q < 0$ then $x_{CJ}^* \in I_L$	$S$ proposes $x_S^* = \underline{x}_L$	$J$ supports $x_S^*$	E3
8	$x_{CJ}^* = \underline{x}_L$	$S$ proposes $x_S^* \in I_C$	$J$ supports $x_{CJ}^*$	E1c
9	9.1 If $\alpha_S < D/2$ then $x_{CJ}^* = \underline{x}_L$	$S$ supports $x_{CJ}^*$	$J$ supports $x_{CJ}^*$	E1a
	9.2 If $\alpha_S > D/2$ then $x_{CJ}^* = \underline{x}_L$	$S$ proposes $x_S^* \in I_C$	$J$ supports $x_{CJ}^*$	E1c

## Figures and Tables

**Figure 1.** Competing Doctrines



**Figure 2:** Decisions of the Game



**Figure 3a.** Scenario I: When  $\alpha_J < \alpha_S < \alpha_{CJ}$  we have the following cases.

Case 1							Case 2						
0	$[\underline{x}_L, \bar{x}_L]$	$[\underline{x}_C, \bar{x}_C]$	J	S	CJ	1	0	$[\underline{x}_L, \bar{x}_L]$	J	$[\underline{x}_C, \bar{x}_C]$	S	CJ	1
Case 3							Case 4						
0	$[\underline{x}_L, \bar{x}_L]$	J	S	$[\underline{x}_C, \bar{x}_C]$	CJ	1	0	$[\underline{x}_L, \bar{x}_L]$	J	S	CJ	$[\underline{x}_C, \bar{x}_C]$	1
Case 5							Case 6						
0	J	$[\underline{x}_L, \bar{x}_L]$	$[\underline{x}_C, \bar{x}_C]$	S	CJ	1	0	J	$[\underline{x}_L, \bar{x}_L]$	S	$[\underline{x}_C, \bar{x}_C]$	CJ	1
Case 7							Case 8						
0	J	$[\underline{x}_L, \bar{x}_L]$	S	CJ	$[\underline{x}_C, \bar{x}_C]$	1	0	J	S	$[\underline{x}_L, \bar{x}_L]$	$[\underline{x}_C, \bar{x}_C]$	CJ	1



Case 9

Case 10

0	J	S	$[\underline{x}_L, \bar{x}_L]$	CJ	$[\underline{x}_C, \bar{x}_C]$	1	0	J	S	CJ	$[\underline{x}_L, \bar{x}_L]$	$[\underline{x}_C, \bar{x}_C]$	1
---	---	---	--------------------------------	----	--------------------------------	---	---	---	---	----	--------------------------------	--------------------------------	---

**Figure 3b.** Scenario II: When  $\alpha_J < \alpha_{CJ} < \alpha_S$  we have the following cases.

Case 1

Case 2

0	$[\underline{x}_L, \bar{x}_L]$	$[\underline{x}_C, \bar{x}_C]$	J	CJ	S	1	0	$[\underline{x}_L, \bar{x}_L]$	J	$[\underline{x}_C, \bar{x}_C]$	CJ	S	1
---	--------------------------------	--------------------------------	---	----	---	---	---	--------------------------------	---	--------------------------------	----	---	---

Case 3

Case 4

0	$[\underline{x}_L, \bar{x}_L]$	J	CJ	$[\underline{x}_C, \bar{x}_C]$	S	1	0	$[\underline{x}_L, \bar{x}_L]$	J	CJ	S	$[\underline{x}_C, \bar{x}_C]$	1
---	--------------------------------	---	----	--------------------------------	---	---	---	--------------------------------	---	----	---	--------------------------------	---

Case 5

---

0	J	$[\underline{x}_L, \bar{x}_L]$	$[\underline{x}_C, \bar{x}_C]$	CJ	S	1
---	---	--------------------------------	--------------------------------	----	---	---

Case 6

---

0	J	$[\underline{x}_L, \bar{x}_L]$	CJ	$[\underline{x}_C, \bar{x}_C]$	S	1
---	---	--------------------------------	----	--------------------------------	---	---

Case 7

---

0	J	$[\underline{x}_L, \bar{x}_L]$	CJ	S	$[\underline{x}_C, \bar{x}_C]$	1
---	---	--------------------------------	----	---	--------------------------------	---

Case 8

---

0	J	CJ	$[\underline{x}_L, \bar{x}_L]$	$[\underline{x}_C, \bar{x}_C]$	S	1
---	---	----	--------------------------------	--------------------------------	---	---

Case 9

---

0	J	CJ	$[\underline{x}_L, \bar{x}_L]$	S	$[\underline{x}_C, \bar{x}_C]$	1
---	---	----	--------------------------------	---	--------------------------------	---

Case 10

---

0	J	CJ	S	$[\underline{x}_L, \bar{x}_L]$	$[\underline{x}_C, \bar{x}_C]$	1
---	---	----	---	--------------------------------	--------------------------------	---

**Figure 3c.** Scenario III. When  $\alpha_{CJ} < \alpha_J < \alpha_S$  we have the following cases.

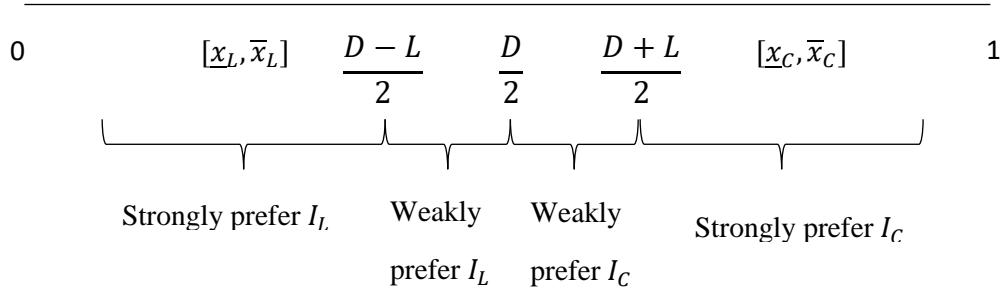
Case 1							Case 2						
0	$[\underline{x}_L, \bar{x}_L]$	$[\underline{x}_C, \bar{x}_C]$	CJ	J	S	1	0	$[\underline{x}_L, \bar{x}_L]$	CJ	$[\underline{x}_C, \bar{x}_C]$	J	S	1
Case 3							Case 4						
0	$[\underline{x}_L, \bar{x}_L]$	CJ	J	$[\underline{x}_C, \bar{x}_C]$	S	1	0	$[\underline{x}_L, \bar{x}_L]$	CJ	J	S	$[\underline{x}_C, \bar{x}_C]$	1
Case 5							Case 6						
0	CJ	$[\underline{x}_L, \bar{x}_L]$	$[\underline{x}_C, \bar{x}_C]$	J	S	1	0	CJ	$[\underline{x}_L, \bar{x}_L]$	J	$[\underline{x}_C, \bar{x}_C]$	S	1
Case 7							Case 8						
0	CJ	$[\underline{x}_L, \bar{x}_L]$	J	S	$[\underline{x}_C, \bar{x}_C]$	1	0	CJ	J	$[\underline{x}_L, \bar{x}_L]$	$[\underline{x}_C, \bar{x}_C]$	S	1

Case 9

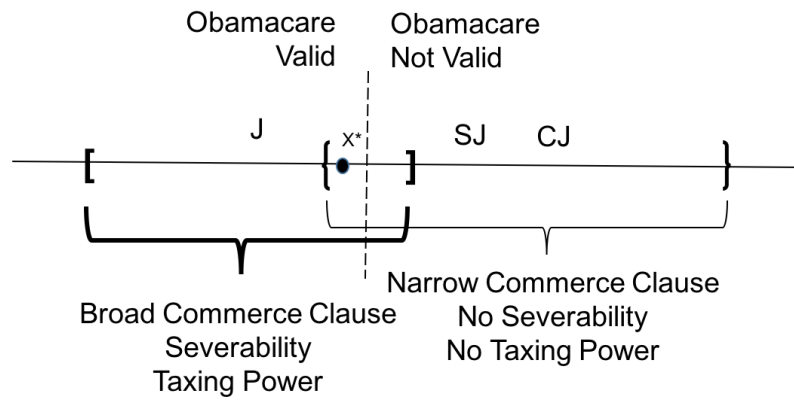
Case 10

<hr/>							<hr/>						
0	CJ	J	$[\underline{x}_L, \bar{x}_L]$	S	$[\underline{x}_C, \bar{x}_C]$	1	0	CJ	J	S	$[\underline{x}_L, \bar{x}_L]$	$[\underline{x}_C, \bar{x}_C]$	1

**Figure 4.** Characterization of Lemma 1



**Figure 5.** Supreme Court and Obamacare



**Figure 6.** Supreme Court and Judicial Campaign Finance

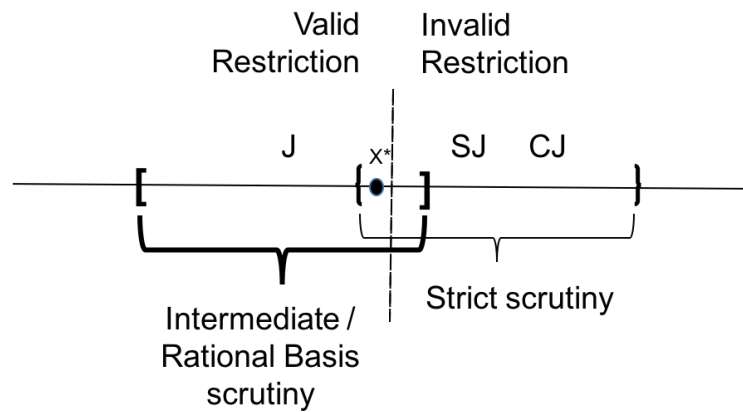


Table Ex1: When J's preferred range is $I_C$ ( $\alpha_J > \frac{D}{2}$ )			
Path	At t = 3	At t = 2	At t = 1
1	$J$ supports $x_{CJ}^*$ . $U_J = 1 - (x_{CJ}^* - \alpha_J)$	$S$ supports $x_{CJ}^*$ . $U_S = 1 - (\alpha_S - x_{CJ}^*)$	$CJ$ proposes $x_{CJ}^* \in I_C$ $U_{CJ} = 1 - (\alpha_{CJ} - x_{CJ}^*) + R$
2	$J$ supports $x_S^*$ . $U_J = 1 - (\alpha_J - \bar{x}_L) - q$	$S$ proposes $x_S^* = \bar{x}_L$ $U_S = 1 - (\alpha_S - \bar{x}_L) + r - q$	$CJ$ proposes $x_{CJ}^* \in I_C$ $U_{CJ} = 1 - (\alpha_{CJ} - \bar{x}_L)$
	$J$ supports $x_{CJ}^*$ . $U_J = 1 - (x_{CJ}^* - \alpha_J)$	$S$ proposes $x_S^* = \bar{x}_L$ $U_S = 1 - (\alpha_S - x_{CJ}^*) - q$	$CJ$ proposes $x_{CJ}^* \in I_C$ $U_{CJ} = 1 - (\alpha_{CJ} - x_{CJ}^*) + R$
3	$J$ supports $x_{CJ}^*$ . $U_J = 1 - (\alpha_J - \bar{x}_L) - q$	$S$ supports $x_{CJ}^*$ . $U_S = 1 - (\alpha_S - \bar{x}_L) - q$	$CJ$ proposes $x_{CJ}^* = \bar{x}_L$ $U_{CJ} = 1 - (\alpha_{CJ} - \bar{x}_L) + R - q$
4	$J$ supports $x_S^*$ . $U_J = 1 - (x_S^* - \alpha_J)$	$S$ proposes $x_S^* \in I_C$ $U_S = 1 - (\alpha_S - x_S^*) + r$	$CJ$ proposes $x_{CJ}^* = \bar{x}_L$ $U_{CJ} = 1 - (\alpha_{CJ} - x_S^*) - q$
	$J$ supports $x_{CJ}^*$ . $U_J = 1 - (\alpha_J - \bar{x}_L) - q$	$S$ proposes $x_S^* \in I_C$ $U_S = 1 - (\alpha_S - \bar{x}_L)$	$CJ$ proposes $x_{CJ}^* = \bar{x}_L$ $U_{CJ} = 1 - (\alpha_{CJ} - \bar{x}_L) + R - q$

Table Ex2: Solution when J's preferred range is $I_C$ ( $\alpha_J > \frac{D}{2}$ )					
Path	Condition 1	Condition 2	At t = 1	At t = 2	At t = 3
1	$r - q < \bar{x}_C - \bar{x}_L$		$x_{CJ}^* = \bar{x}_C$	$S$ supports $x_{CJ}^*$ .	$J$ supports $x_{CJ}^*$ and $CJ$ writes it.
	$r - q > \bar{x}_C - \bar{x}_L$				
1		$\alpha_J > \frac{\bar{x}_C + \bar{x}_L}{2} - \frac{q}{2}$	$x_{CJ}^* = \bar{x}_C$	$S$ supports $x_{CJ}^*$ .	$J$ supports $x_{CJ}^*$ and $CJ$ writes it.
1		$\alpha_J \in \left[ \frac{x_C + \bar{x}_L}{2}, \frac{q}{2}, \frac{\bar{x}_C + \bar{x}_L}{2} - \frac{q}{2} \right]$	$x_{CJ}^* = 2\alpha_J + q - \bar{x}_L$	$S$ supports $x_{CJ}^*$ .	$J$ supports $x_{CJ}^*$ and $CJ$ writes it.
4		$\alpha_J < \frac{x_C + \bar{x}_L}{2} - \frac{q}{2}$	$x_{CJ}^* = \bar{x}_L$	$x_S^* \in I_C$	$J$ supports $x_{CJ}^*$ and $CJ$ writes it.

Table Ex3: $\bar{x}_L < \alpha_{CJ} < \frac{D}{2} < \alpha_J < \frac{L+D-q}{2} < \underline{x}_C < \bar{x}_C < \alpha_S$			
Path	At t = 3	At t = 2	At t = 1
1	$J$ supports $x_{CJ}^*$ . $U_J = 1 - (\underline{x}_C - \alpha_J)$	$S$ supports $x_{CJ}^*$ $U_S = 1 - (\alpha_S - \underline{x}_C)$	$CJ$ proposes $x_{CJ}^* = \underline{x}_C$ $U_{CJ} = 1 - (\underline{x}_C - \alpha_{CJ}) + R - q$
2	$J$ supports $x_S^*$ . $U_J = 1 - (\alpha_J - \bar{x}_L) - q$	$S$ proposes $x_S^* = \bar{x}_L$ $U_S = 1 - (\alpha_S - \bar{x}_L) + r - q$	$CJ$ proposes $x_{CJ}^* = \underline{x}_C$ $U_{CJ} = 1 - (\alpha_{CJ} - \bar{x}_L)$
	$J$ supports $x_{CJ}^*$ . $U_J = 1 - (\underline{x}_C - \alpha_J)$	$S$ proposes $x_S^* = \bar{x}_L$ $U_S = 1 - (\alpha_S - x_{CJ}^*) - q$	$CJ$ proposes $x_{CJ}^* = \underline{x}_C$ $U_{CJ} = 1 - (\underline{x}_C - \alpha_{CJ}) + R - q$
3	$J$ supports $x_{CJ}^*$ . $U_J = 1 - (\alpha_J - \bar{x}_L) - q$	$S$ supports $x_{CJ}^*$ . $U_S = 1 - (\alpha_S - \bar{x}_L) - q$	$CJ$ proposes $x_{CJ}^* = \bar{x}_L$ $U_{CJ} = 1 - (\alpha_{CJ} - \bar{x}_L) + R$
4	$J$ supports $x_S^*$ . $U_J = 1 - (x_S^* - \alpha_J)$	$S$ proposes $x_S^* \in I_C$ $U_S = 1 - (\alpha_S - x_S^*) + r$	$CJ$ proposes $x_{CJ}^* = \bar{x}_L$ $U_{CJ} = 1 - (x_S^* - \alpha_{CJ})$
	$J$ supports $x_{CJ}^*$ . $U_J = 1 - (\alpha_J - \bar{x}_L) - q$	$S$ proposes $x_S^* \in I_C$ $U_S = 1 - (\alpha_S - \bar{x}_L)$	$CJ$ proposes $x_{CJ}^* = \bar{x}_L$ $U_{CJ} = 1 - (\alpha_{CJ} - \bar{x}_L) + R$



Table 2: Equilibria conditional on Justices Preferences					
		Justice $CJ$			
		<i>Strongly <math>I_C</math></i>	<i>Weakly <math>I_C</math></i>	<i>Strongly <math>I_L</math></i>	<i>Weakly <math>I_L</math></i>
(S preferred range, J preferred range)	$(SI_C, SI_C)$	E1a	E1a	E2b if $R$ large E3 if $R$ small	E2b if $R$ large E3 if $R$ small
	$(SI_C, WI_C)$	E1a	E1a	E2b if $R$ large E3 if $R$ small	E2b if $R$ large E3 if $R$ small
	$(SI_C, SI_L)$	E1b if $r$ small E2a if $r$ large	E1b if $r$ small E2a if $r$ large	E1c	E1c
	$(SI_C, WI_L)$	E1b if $r$ small E2a if $r$ large	E1b if $r$ small E2a if $r$ large	E1c	E1c
	$(WI_C, SI_C)$	E1a	E1a	E2b if $R$ large E3 if $R$ small	E2b if $R$ large E3 if $R$ small
	$(WI_C, WI_C)$	E1a	E1a	E2b if $R$ large E3 if $R$ small	E2b if $R$ large E3 if $R$ small
	$(WI_C, SI_L)$	E1b if $r$ small E2a if $r$ large	E1b if $r$ small E2a if $r$ large	E1c	E1c
	$(WI_C, WI_L)$	E1b if $r$ small E2a if $r$ large	E1b if $r$ small E2a if $r$ large	E1c	E1c
	$(SI_L, SI_C)$	E1c	E1c	E1b if $r$ small E2a if $r$ large	E1b if $r$ small E2a if $r$ large
	$(SI_L, WI_C)$	E1c	E1c	E1b if $r$ small E2a if $r$ large	E1b if $r$ small E2a if $r$ large
	$(SI_L, SI_L)$	E2b if $R$ large E3 if $R$ small	E2b if $R$ large E3 if $R$ small	E1a	E1a
	$(SI_L, WI_L)$	E2b if $R$ large E3 if $R$ small	E2b if $R$ large E3 if $R$ small	E1a	E1a
	$(WI_L, SI_C)$	E1c	E1c	E1b if $r$ small E2a if $r$ large	E1b if $r$ small E2a if $r$ large
	$(WI_L, WI_C)$	E1c	E1c	E1b if $r$ small E2a if $r$ large	E1b if $r$ small E2a if $r$ large
	$(WI_L, SI_L)$	E2b if $R$ large E3 if $R$ small	E2b if $R$ large E3 if $R$ small	E1a	E1a
	$(WI_L, WI_L)$	E2b if $R$ large E3 if $R$ small	E2b if $R$ large E3 if $R$ small	E1a	E1a
Example on how to read notation: $(SI_C, WI_L)$ means that $S$ strongly prefers $I_C$ and $J$ weakly prefers $I_L$ .					

Table 3: Justices ideologies might be located inside the policy ranges. Scenario I					
Case		$[\underline{x}_L, \bar{x}_L]$		$[\underline{x}_C, \bar{x}_C]$	
1	J S CJ				
2	J S	CJ			
3	J S		CJ		
4	J S			CJ	
5	J S				CJ
6	J	S CJ			
7	J	S	CJ		
8	J	S		CJ	
9	J	S			CJ
10	J		S CJ		
11	J		S	CJ	
12	J		S		CJ
13	J			S CJ	
14	J			S	CJ
15	J				S CJ
16		J S CJ			
17		J S	CJ		
18		J S		CJ	
19		J S			CJ
20		J	S CJ		
21		J	S	CJ	
22		J	S		CJ
23		J		S CJ	
24		J		S	CJ
25		J			S CJ
26			J S CJ		
27			J S	CJ	
28			J S		CJ
29			J	S CJ	
30			J	S	CJ
31			J		S CJ
32				J S CJ	
33				J S	CJ
34				J	S CJ
35					J S CJ

Table 4: Policy ranges can (partially) overlap. Scenario I					
Case		$[\underline{x}_L, \underline{x}_C]$	$[\underline{x}_C, \bar{x}_L]$	$[\bar{x}_L, \bar{x}_C]$	
1	J S CJ				
2	J S	CJ			
3	J S		CJ		
4	J S			CJ	
5	J S				CJ
6	J	S CJ			
7	J	S	CJ		
8	J	S		CJ	
9	J	S			CJ
10	J		S CJ		
11	J		S	CJ	
12	J		S		CJ
13	J			S CJ	
14	J			S	CJ
15	J				S CJ
16		J S CJ			
17		J S	CJ		
18		J S		CJ	
19		J S			CJ
20		J	S CJ		
21		J	S	CJ	
22		J	S		CJ
23		J		S CJ	
24		J		S	CJ
25		J			S CJ
26			J S CJ		
27			J S	CJ	
28			J S		CJ
29			J	S CJ	
30			J	S	CJ
31			J		S CJ
32				J S CJ	
33				J S	CJ
34				J	S CJ
35					J S CJ

<b>Table 5: Policy ranges can (completely) overlap. Scenario I</b>					
Case		$[\underline{x}_L, \underline{x}_C]$	$[\underline{x}_C, \bar{x}_C]$	$[\bar{x}_C, \bar{x}_L]$	
1	J S CJ				
2	J S	CJ			
3	J S		CJ		
4	J S			CJ	
5	J S				CJ
6	J	S CJ			
7	J	S	CJ		
8	J	S		CJ	
9	J	S			CJ
10	J		S CJ		
11	J		S	CJ	
12	J		S		CJ
13	J			S CJ	
14	J			S	CJ
15	J				S CJ
16		J S CJ			
17		J S	CJ		
18		J S		CJ	
19		J S			CJ
20		J	S CJ		
21		J	S	CJ	
22		J	S		CJ
23		J		S CJ	
24		J		S	CJ
25		J			S CJ
26			J S CJ		
27			J S	CJ	
28			J S		CJ
29			J	S CJ	
30			J	S	CJ
31			J		S CJ
32				J S CJ	
33				J S	CJ
34				J	S CJ
35					J S CJ