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## MEASURING AGENCY PREFERENCES: EXPERTS, VOTING, AND THE POWER OF CHAIRS

#### Daniel E. Ho\*

#### "CLIMATE OF FEAR"

All was not well at the Federal Communications Commission (FCC). Allegations, particularly against Chairman Kevin J. Martin, were swirling on the Hill for months. In January 2008, the FCC's House Oversight Committee launched an investigation into the FCC's regulatory process. After sifting through several hundred thousand documents, the majority staff of the Committee issued a scathing 110-page report, titled *Deception and Distrust: The Federal Communications Commission Under Chairman Kevin J. Martin.*<sup>1</sup>

The charges read like an indictment: "Chairman Martin's heavy-handed, opaque, and non-collegial management style has created distrust, suspicion, and turmoil among the five current Commissioners." In the proceeding for the annual report to Congress on video competition, Martin concealed data from the other Commissioners until 7:00 P.M. the night before the public vote and withheld the report in "callous disregard for . . . statutory obligations." The Chairman's office ignored warnings of some \$100 million in overcharges of consumers, in what the Chief of the Disability Rights Office described as "a classic fleecing of America." And the hallmark of Martin's leadership

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<sup>1.</sup> Majority Staff of H.R. Comm. on Energy & Commerce, 110th Cong., Deception and Distrust: The Federal Communications Commission Under Chairman Kevin J. Martin 1–2 (2008) [hereinafter Deception and Distrust], available at http://energycommerce.house.gov/.

<sup>2.</sup> Id. at 2.

<sup>3.</sup> Id. at 13-14.

<sup>4.</sup> Id. at 5-7.

appeared to be micromanagement—even to the degree of scrutinizing the hiring of student interns—leading to "decision paralysis" at the Commission.<sup>5</sup> FCC employees even coined a special term for Martin's personnel moves: being "Martinized" came to refer to an involuntary transfer of senior staff to inferior positions.<sup>6</sup>

Such practice, if true, flies in the face of New Deal conceptions that independent regulatory commissions are insulated from politics and able to bring expert judgment to complex regulatory affairs. The report noted as much when discussing Martin's peremptory reversal of the "à la carte" cable report: "Congress created the FCC (and the other independent regulatory agencies) to provide independent regulatory and adjudicatory decisionmaking . . . . Chairman Martin's manipulation . . . calls into question the reliability of telecommunications information and analysis provided by the FCC to Congress."

Although notable by itself, how representative was Martin's "climate of fear" as a matter of history? After all, Martin's response to the allegations was that he simply "followed the same procedures that have been followed for the past 15 years by FCC Chairmen." Was the tight control exercised by the Chair over the ostensibly "collegial" commission an outlier? How different are agency chairs from their brethren?

## II. THE EMPIRICAL INQUIRY OF INSTITUTIONAL DESIGN AND POLICY

While much administrative law scholarship examines questions of how agencies *should* be designed, we have relatively little systematic empirical knowledge about how these features of institutional design affect actual operation.<sup>11</sup> Are independent regulatory commissions

<sup>5.</sup> Id. at 19-20.

<sup>6.</sup> Id. at 19.

<sup>7.</sup> See, e.g., Humphrey's Ex'r v. United States, 295 U.S. 602, 624 (1935) ("The commission is to be nonpartisan; and it must, from the very nature of its duties, act with entire impartiality. It is charged with the enforcement of no policy except the policy of the law. . . . [I]ts members are called upon to exercise the trained judgment of a body of experts 'appointed by law and informed by experience."").

<sup>8.</sup> DECEPTION AND DISTRUST, supra note 1, at 11.

<sup>9.</sup> Id. at 19.

<sup>10.</sup> Letter from Kevin J. Martin, FCC Chairman, to Henry A. Waxman, Chairman, H.R. Comm. on Energy & Commerce 1 (Jan. 19, 2009), available at http://www.fcc.gov/commissioners/previous/martin/statements.html.

<sup>11.</sup> Cf. David E. Lewis, Presidents and the Politics of Agency Design 11-12 (2003) (noting the lack of explanation for certain administrative agency structures); Cary Coglianese, Empirical Analysis and Administrative Law, 2002 U. Ill. Rev. 1111, 1111 (emphasizing that "empirical research on how procedures affect administrative agencies is vital to improving administrative law in ways that will contribute to more effective and legitimate governance");

"independent" as a matter of legal nomenclature but effectively controlled by Congress or the President? Does plenary presidential authority to elevate and demote the chair of a commission affect the functioning of a commission? More generally, what impacts do statutory design features—such as staggered and fixed terms, protection from at-will removal, and partisan composition requirements—have on federal agencies?

One measure that is central to understanding the empirical operation of the administrative state are measures of policy preferences of agency actors, which characterize underlying differences between actors in a policy space. Such measures are central to any empirical test of positive political theory that is predicated upon preferences in a policy space, <sup>12</sup> and they empower more systematic inquiry into the institutional interaction between agencies, the President, Congress, and the courts.

Yet while social science has made substantial headway in quantifying such measures when voting data from discrete actors exists, 13 such measurement remains a formidable challenge for administrative law, where voting data is expensive to collect, unavailable, or entirely nonexistent. The dearth of voting data stunts the growth of knowledge, as rapid advances in positive political theory remain sorely untestable. To fill this vacuum, scholars have recently proposed eliciting regulatory preferences (sometimes termed "ideal points") by using expert surveys as an alternative to vote-based measures. 14 If valid, such surveys promise to considerably speed up the accumulation of knowledge. But because there is no gold standard for the accurate measure-

Anne Joseph O'Connell, *Political Cycles of Rulemaking: An Empirical Portrait of the Modern Administrative State*, 94 Va. L. Rev. 889, 893 (2008) (observing that "[d]espite the vast scope and variability of regulatory activity, there is little empirical examination" of questions of agency procedure).

<sup>12.</sup> See, e.g., David Epstein & Sharyn O'Halloran, Delegating Powers: A Transaction Cost Politics Approach to Policy Making Under Separate Powers 24–27 (1999) (modeling the effect of separation of powers on policy making); John Ferejohn & Charles Shipan, Congressional Influence on Bureaucracy, 6 J.L. Econ. & Org. 1, 5–9 (1990) (inspecting the roles that judicial review and presidential vetoes play in legislative decision making); McNollgast, The Political Origins of the Administrative Procedure Act, 15 J.L. Econ. & Org. 180, 184–89 (1999) (studying the motives of legislators during the passage of the Administrative Procedure Act); Matthew C. Stephenson, Legislative Allocation of Delegated Power: Uncertainty, Risk, and the Choice Between Agencies and Courts, 119 Harv. L. Rev. 1036, 1043–44 (2006) (modeling the decisions of legislators to delegate authority to either agencies or the judiciary).

<sup>13.</sup> See infra note 16.

<sup>14.</sup> See, e.g., Joshua D. Clinton & David E. Lewis, Expert Opinion, Agency Characteristics, and Agency Preferences, 16 Pol. Analysis 3, 4-5 (2008) (asking academics, journalists, and think tank members to rate eighty-two government departments and agencies as "liberal" or "conservative").

ment of ideal points—unlike in causal inference, where the gold standard of an experiment governs at least hypothetically<sup>15</sup>—the relative merits of vote- and expert-based ideal points remain largely unexamined. To study the advantages and disadvantages of expert-based ideal points, this Article presents results from a new survey of top communications experts about the FCC and compares these results to ideal points based on actual voting records at the FCC.

The results contribute to several areas of scholarship. First, this Article speaks directly to the literature on measurement of ideal points, 16 focusing on the relative merits of expert surveys, which have been used in a wide variety of settings.<sup>17</sup> In an important study, Clinton and Lewis (CL) propose to use expert surveys to place administrative agencies on a common policy scale.<sup>18</sup> CL analyze survey responses from twenty-six experts—including academics, journalists, think tank experts, and agency employees—who rated eighty-two government agencies (not individual decision makers) as having a liberal or conservative slant.<sup>19</sup> Further, CL propose to systematically account for inter-rater differences by applying item response theory (IRT) to the survey.20 The analysis in this Article similarly adjusts survey responses, but focuses specifically on telecommunications expert ratings from a new survey of the regulatory philosophies of individual commissioners, for whom vote-based ideal points have been recently derived.<sup>21</sup> Previous work amasses FCC voting data that comprise a total

<sup>15.</sup> See, e.g., Daniel E. Ho, Kosuke Imai, Gary King & Elizabeth A. Stuart, Matching As Nonparametric Preprocessing for Reducing Model Dependence in Parametric Causal Inference, 15 Pol. Analysis 199, 205-06 (2007).

<sup>16.</sup> See, e.g., Joshua Clinton, Simon Jackman & Douglas Rivers, The Statistical Analysis of Roll Call Data, 98 Am. Pol. Sci. Rev. 355, 355-56 (2004); Daniel E. Ho & Kevin M. Quinn, Viewpoint Diversity and Media Consolidation: An Empirical Study, 61 Stan. L. Rev. 781, 819-24 (2009); Andrew D. Martin & Kevin M. Quinn, Dynamic Ideal Point Estimation via Markov Chain Monte Carlo for the U.S. Supreme Court, 1953-1999, 10 Pol. Analysis 134, 134-36 (2002); Keith T. Poole, Recovering a Basic Space from a Set of Issue Scales, 42 Am. J. Pol. Sci. 954, 954-57 (1998).

<sup>17.</sup> See, e.g., John Huber & Ronald Inglehart, Expert Interpretations of Party Space and Party Locations in 42 Societies, 1 Party Pol. 73, 75-77 (1995); Leonard Ray, Measuring Party Orientations Towards European Integration: Results from an Expert Survey, 36 Eur. J. Pol. Res. 283, 285-87 (1999); Paul V. Warwick, Do Policy Horizons Structure the Formation of Parliamentary Governments?: The Evidence from an Expert Survey, 49 Am. J. Pol. Sci. 373, 376-78 (2005); Erik Voeten, Legislator Preferences, Ideal Points, and the Spatial Model in the European Parliament (Inst. of Governmental Studies, Working Paper No. 2005-12, 2005).

<sup>18.</sup> See Clinton & Lewis, supra note 14, at 4-5.

<sup>19.</sup> See id. at 5.

<sup>20.</sup> See id. at 7-9.

<sup>21.</sup> See Daniel E. Ho, Congressional Agency Control: The Impact of Statutory Partisan Requirements on Regulation (Feb. 12, 2007) (unpublished manuscript), http://dho.stanford.edu/research/partisan.pdf.

of 94,693 votes cast by 46 Commissioners in 17,879 adjudications and rulemakings from 1965 to 2006.<sup>22</sup> Combining these data permits an ideal comparison of the relative merits of learning from expert surveys versus learning from formal voting records. In this Article, I show that the resulting measures are largely comparable, suggesting that (1) when studying aggregate trends, experts can serve as fairly reliable substitutes to voting records, and (2) sincere voting assumptions that are implicit in vote-based IRT models may be reasonable. On the other hand, I find that the survey is marred by lack of historical coverage and tainted by apparent manipulation by experts.<sup>23</sup> Most interestingly, I find evidence that systematic differences between the two approaches may be due to either one or both of the following: (1) agenda-setting power of the chair of the FCC, which vote-based measures fail to capture; (2) perceptual bias by experts in attributing the output of a commission to its chair.

Second, this Article substantively contributes to the study of bureaucratic politics, regulation, and administrative law. It provides alternative estimates of FCC commissioner regulatory ideal points. Although regulatory ideal points have been estimated for other agencies,<sup>24</sup> none were available for the FCC until recently. Most interestingly, the Article shows that vote-based studies of regulatory behavior may fail to capture essential parts of agency behavior, namely, the agenda-setting power of agency chairs. Many scholars have conjectured about the theoretical importance of the power of the chair in regulatory commissions.<sup>25</sup> For example, Knott examines the power of

<sup>22.</sup> See id.

<sup>23.</sup> See infra discussion accompanying note 62.

<sup>24.</sup> Cf. Terry M. Moe, Regulatory Performance and Presidential Administration, 26 Am. J. Pol. Sci. 197, 207–18 (1982) (studying NLRB, FTC, and SEC decisions); Terry M. Moe, Control and Feedback in Economic Regulation: The Case of the NLRB, 79 Am. Pol. Sci. Rev. 1094, 1103–1114 (1985) (studying how NLRB policy changes across different presidential administrations and ensuing appointments); David C. Nixon, Separation of Powers and Appointee Ideology, 20 J.L. Econ. & Org. 438, 443–46 (2004) (determining agency appointee ideology by focusing on nominees who served in Congress); Susan K. Snyder & Barry R. Weingast, The American System of Shared Powers: The President, Congress, and the NLRB, 16 J.L. Econ. & Org. 269, 285–91 (2000) (analyzing how appointments to the NLRB change the agency's policy direction).

<sup>25.</sup> See, e.g., Stephen G. Breyer & Richard B. Stewart, Administrative Law and Regulatory Policy: Problems, Text, and Cases 124 (2d ed. 1985) (referring to the chairmanship of an independent regulatory agency as "a far more important job" than that of other commissioners); Martha Derthick & Paul J. Quirk, The Politics of Deregulation 86–88 (1985) (describing anecdotally the implicit power exercised by agency chairs); Marshall J. Breger & Gary J. Edles, Established by Practice: The Theory and Operation of Independent Federal Agencies, 52 Admin. L. Rev. 1111, 1164–81 (2000) (noting that the powers of the chair often extend beyond those granted by statute); Harry M. Shooshan III, A Modest Proposal for Restructuring the Federal Communications Commission, 50 Fed. Comm. L.J. 637, 648 (1998) (mentioning the control given to the chair's staff in drafting opinions); Peter L. Strauss, The Place of

the Federal Reserve Board chair, measuring chair power in terms of the dissent rate.26 Likewise, Altfeld and Miller conducted experiments that simulated committee decision making, finding that chairs may influence outcomes with agenda control and real or perceived informational advantages.<sup>27</sup> At the FCC, chairs possess relatively limited powers beyond those of commissioners, such as the power to convene meetings and to appoint bureau and office heads, subject to approval by the Commission.<sup>28</sup> Welborn describes the responsiveness of commissioners to the chair as moderate and the discretion of the chair as limited;<sup>29</sup> Duffy similarly characterizes the power of the chair as increasing historically from weak to modest.<sup>30</sup> Krasnow, Longley, and Terry hypothesize that despite the fact that "[u]nlike the heads of most regulatory commissions, the Chairman of the FCC has little formal 'extra' power. . . . [but] is more than first among equals."31 Robinson asserts that the "chairman and a handful of staff... can and usually do exercise nearly total control over [the] agency's basic policy agenda."32 Nixon and Grayson document that the demotion of a chair by a new presidential administration effectively secures a new appointment because demoted chairs typically resign the remainder of their term.<sup>33</sup> To my knowledge, this study provides the first systematic empirical evidence that chairs of commissions—typically selected atwill by Presidents—may possess power beyond the formal vote.

Agencies in Government: Separation of Powers and the Fourth Branch, 84 COLUM. L. REV. 573, 590–91 (1984) (arguing that a chair's control over an agency's administrative functions leads to dominance over commission policymaking); Richard E. Wiley, "Political" Influence at the FCC, 1988 DUKE L.J. 280, 282–84 (describing how Congress seeks to influence the FCC through contact with the chair, and implying additional, implicit powers for the chair).

<sup>26.</sup> See Jack H. Knott, The Fed Chairman As a Political Executive, 18 Admin. & Soc'y 197, 207-09 (1986).

<sup>27.</sup> See Michael F. Altfeld & Gary J. Miller, Sources of Bureaucratic Influence: Expertise and Agenda Control, 28 J. Conflict Resol. 701, 708-16 (1984).

<sup>28.</sup> See Kimberly A. Zarkin & Michael J. Zarkin, The Federal Communications Commission: Front Line in the Culture and Regulation Wars 29–30 (2006); Breger & Edles, *supra* note 25, at 1170–71.

<sup>29.</sup> See David M. Welborn, Governance of Federal Regulatory Agencies 32 (1977).

<sup>30.</sup> See John F. Duffy, The Death of the Independent Regulatory Commission (and the Birth of a New Independence?) (June 9, 2006) (unpublished manuscript, on file with the author).

<sup>31.</sup> Erwin G. Krasnow, Lawrence D. Longley & Herbert A. Terry, The Politics of Broadcast Regulation 43–44 (3d ed. 1982).

<sup>32.</sup> Glen O. Robinson, Independent Agencies: Form and Substance in Executive Prerogative, 1988 DUKE L.J. 238, 245 n.24.

<sup>33.</sup> See David C. Nixon & Thomas M. Grayson, Chairmen and the Independence of Independent Regulatory Commissions 12 (Mar. 2003) (unpublished paper presented at the annual meeting of the Midwest Political Science Association, on file with author).

Finally, these findings broadly pertain to the congressional literature on aspects of behavior that roll calls may miss<sup>34</sup> and to the survey measurement strategies of preferences untainted by legislative procedure.<sup>35</sup>

The Article proceeds as follows. Part III presents the data used for this study and discusses the survey design and unique methodological challenges posed by expert surveys, as well as voting data from the FCC.<sup>36</sup> Part IV briefly outlines the intuition of accounting of interexpert differences in rating behavior with statistical adjustments, with formal details appearing in the Appendix.<sup>37</sup> Part V presents survey results and compares them with vote-based ideal points.<sup>38</sup> Part VI discusses and demonstrates the relative advantages and disadvantages of expert surveys.<sup>39</sup> Part VII concludes with a discussion of the power of chairs.<sup>40</sup>

#### III. DATA

#### A. A New Survey of Communications Experts

Selecting Experts: To begin, I compiled a dataset of names, institutional affiliations, and contact information of academics, policymakers, industry groups, lawyers, agency officials, and all former FCC commissioners. The sources used to locate experts included trade reporters (e.g., Broadcasting and Cable), academic journals (e.g., Federal Communications Law Journal), professional associations (e.g., the Federal Communications Bar Association), books on communications law and policy, and professional conference programs. The inclusion criteria were relatively narrow: to qualify as an expert, an individual should be able to opine on the regulatory preferences of a large number of commissioners. Particular attention was paid to sectoral and age variation, so as to obtain views from a wide variety of sources and increase historical coverage. Ideally, one could formalize the target

<sup>34.</sup> See, e.g., Benjamin Highton & Michael S. Rocca, Beyond the Roll-Call Arena: The Determinants of Position Taking in Congress, 58 Pol. Res. Q. 303, 303–06 (2005) (studying the decisions by legislators of whether or not to take a position in a non-roll-call setting); Peter M. Vandoren, Can We Learn the Causes of Congressional Decisions from Roll-Call Data?, 15 Legis. Stud. Q. 311, 311–313 (1990) (arguing that roll call votes are not a random sample and miss important aspects of legislative decision making).

<sup>35.</sup> See Stephen Ansolabehere, James M. Snyder, Jr. & Charles Stewart III, The Effects of Party and Preference on Congressional Roll-Call Voting, 26 Legis. Stud. Q. 533, 533-535 (2001) (comparing legislators' roll call votes to surveys of their political preferences).

<sup>36.</sup> See infra notes 41-51 and accompanying text.

<sup>37.</sup> See infra notes 52-54 and accompanying text.

<sup>38.</sup> See infra notes 55-60 and accompanying text.

<sup>39.</sup> See infra notes 61-63 and accompanying text.

<sup>40.</sup> See infra notes 64-80 and accompanying text.

Table 1
Summary of Expert Survey Respondent Sample Size

	No.	Prop.	
A. Preliminary expert list	276		
B. Experts alive and with email addresses	249	0.90	$\left(=\frac{B}{A}\right)$
C. Bounced addresses	17	0.07	$\left(=\frac{C}{B}\right)$
D. Secondary emails obtained	7	0.41	$\left(=\frac{D}{C}\right)$
E. Additional experts referred to in comments	7		
F. Total experts attempted to contact	246		
G. Total responses	78	0.32	$\left(=\frac{G}{F}\right)$

For example, row A represents that the preliminary expert list contained 276 experts, of which 249 (90%) are shown in row B to be alive with email addresses on record. The last column depicts the proportion between pertinent rows (e.g., proportion in row B represents the number in row B divided by row A).

population more clearly (i.e., with an identified sampling frame), but the difficulty of identifying the inclusion criteria, particularly when the agency knowledge required to do so might itself eviscerate the need to estimate ideal points, seems inherent to expert surveys.

The preliminary expert list included 276 individuals, as denoted by row A of Table 1. Because most experts are at the top of the field of telecommunications, and are therefore likely to have functioning internet connections,<sup>41</sup> an electronic survey seemed feasible. Of the 276 experts, I collected email addresses from proprietary and industry registries, narrowing the list to 249 experts, as denoted by row B of Table 1.

Contacting Experts: One of the major challenges of expert surveys is that individuals with deep, intimate knowledge of the subject are also likely the most time constrained. Nonresponse threatens the survey. Simply emailing the experts was therefore deemed to be risky. To alleviate the potential for high nonresponse, I secured endorsement of the survey by Reed Hundt, a former chairman of the FCC, and from Stanford University's Rock Center for Corporate Governance.<sup>42</sup> The initial invitation, depicted in Appendix B.1, was sent out

<sup>41.</sup> See Shannon K. Orr, New Technology and Research: An Analysis of Internet Survey Methodology in Political Science, 38 Pol. Sci. & Pol. 263, 263 (2005) (noting that "many of the populations of interest to political scientists such as interest groups, elected officials, and bureaucrats have near universal access to the web").

<sup>42.</sup> Joe Grundest kindly facilitated these endorsements.

under Hundt's name. To minimize any concern by experts that their ratings would be revealed and to foster honest ratings, strict anonymity was guaranteed to all respondents. This eliminated individual response tracking and targeted reminder messages, trading off the risks of nonresponse with breach of survey security (e.g., multiple or unsolicited submissions).

Of the 249 initial emails, 17 bounced,<sup>43</sup> but secondary email addresses were obtained for 7 of these 17 (see rows C and D of Table 1). To increase the number of expert respondents, the survey additionally prompted respondents to recommend other experts to whom to administer the survey. Many of these references overlapped with our initial list, providing some external validation and increasing the number of experts by 7. Although there is no way to determine whether experts in fact received the invitation to participate in the survey, we attempted to contact 246 experts (= 249 initial emails – 17 bounced emails + 7 secondary emails + 7 referred experts not on the initial list). When emails bounced and secondary email addresses could not be obtained, we personally called respondents to encourage participation.

As shown in row G of Table 1, 78 out of 246 experts submitted responses, making for a 32% response rate. The number of responses is comparable to other expert surveys (CL use 26 respondents),<sup>44</sup> but is significantly lower than in conventional surveys, a concern I address in Part VI.D. The statistical analysis accounts for instances in which respondents did not respond to all survey questions.<sup>45</sup> Figure 1 presents the stated communications backgrounds of experts, showing that there is a fairly even distribution of experts between FCC service, legal practice, academia, other government service, and industry practice.

Survey Design: To increase trust in and hence response rate to the survey, it was "branded" with its own website at a credible domain: http://fcc.stanford.edu. For details, see Appendix B.2. Web survey templates by Zoomerang, an online survey company, were substantially altered to create a more credible, professional appearance. Appendix B.3 presents the full survey. The primary question of interest

<sup>43.</sup> A "bounced" email is not received by the intended recipient. The email is returned to the sender, and an automated message informs the sender of the failed delivery.

<sup>44.</sup> Clinton & Lewis, supra note 14, at 5 (describing survey of 26 experts).

<sup>45.</sup> The assumptions are that ratings are "missing at random" and distinctness of model and missingness parameters. See Roderick J.A. Little & Donald B. Rubin, Statistical Analysis with Missing Data 53 (1987); Eric T. Bradlow & Neal Thomas, Item Response Theory Models Applied to Data Allowing Examinee Choice, 23 J. Educ. & Behav. Stat. 236, 237–38 (1998).

### FIGURE 1 RESPONDENT FCC EXPERIENCE

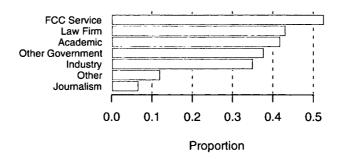


Figure 1 presents the proportion of respondents answering the question of the "background for [their] telecommunications expertise." Categories are nonexclusive.

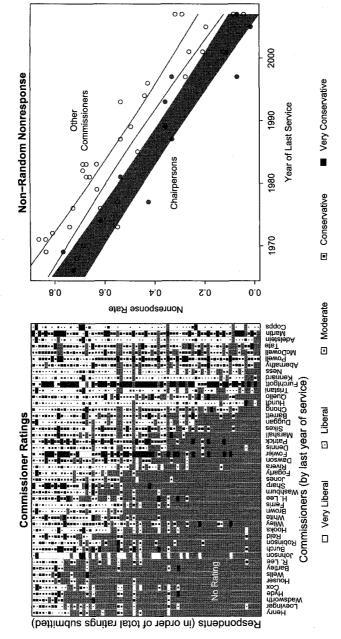
was, "Please rate on a scale from 1 to 5, from 'liberal' to 'conservative', the regulatory philosophies of the following FCC Commissioners. Please provide ratings only for commissioners for whom you possess sufficient knowledge."

Consistent with CL, I intentionally used the all-encompassing term "regulatory philosophies," so as to let experts determine how to interpret the scale. I return to this issue of interpretation in Part VI.<sup>46</sup> To accord with the voting data available from 1965 to 2006, all 46 commissioners who served during that period were included in the survey. Although randomization of question order is typically advisable, commissioners were listed in reverse chronological order—by first year of service—on a single page to facilitate access and minimize any effort required to respond. Experts were asked only to check boxes for commissioners for whom they felt they had requisite knowledge—N/A boxes were provided for ratings inadvertently entered—and were able to see the entire survey on one webpage (no branching).

Figure 2 presents the raw data in the left panel, where rectangle size corresponds to ratings submitted by experts (in rows) on commissioners (in columns). The experts are ordered by total ratings submitted and the commissioners are ordered by last year of service. The striking pattern is the increasing response rate over time. While this pattern may be partially induced by the order of questions, respondents did in fact provide ratings for a number of commissioners spanning back in time (e.g., Nicholas Johnson, Commissioner from 1966 to

<sup>46.</sup> See infra notes 52-54 and accompanying text.

FIGURE 2 SURVEY DATA AND NONRESPONSE PATTERNS



Experts are sorted by the number of ratings submitted, and Commissioners are sorted chronologically by their last year of service. The right panel plots the nonresponse rate for each Commissioner on the y-axis by the year of last service on the x-axis. Hollow dots represent non-chair Commissioners and filled dots represent (non-interim) chairs. Nonresponse decreases approximately linearly over time, as indicated by the fitted 95% credible bands from a linear model The left panel presents submitted ratings of Commissioners (in columns) by experts (in rows). Rectangle size corresponds to rating, as indicated by the legend. with an indicator for chairs. 1973). Nonresponse is more likely driven by lack of historical knowledge about commissioners. The right panel in Figure 2 plots nonresponse rates on the y-axis for commissioners by last year of service on the x-axis. Hollow dots represent non-chair commissioners and filled dots represent (non-interim) chairs. The panel uncovers a stark pattern: response rates are substantially and almost uniformly higher for chairs of the commission. Ninety-five percent credible bands of nonresponse rates from a simple linear fit against time are substantially lower for chairs. Respondents remember chairs.

#### B. Voting Data

To evaluate the expert survey method, I compare survey results to vote-based data that were collected and analyzed in an earlier study.<sup>47</sup> The voting data consists of 17,879 adjudications and rulemakings from 1965 to 2006, comprising 94,693 votes cast by 46 commissioners.<sup>48</sup> Each commissioner is observed as voting in the majority, concurring, partially dissenting, or dissenting in toto.<sup>49</sup> Using nonunanimous cases, the earlier study estimated a multilevel ordinal IRT model to test whether statutory partisan requirements—which provide for a maximum number of commissioners from a single political party—constrain presidential appointments.<sup>50</sup> I found that (1) commissioner partisan affiliation largely explains voting patterns, suggesting that there are generally no "wolves in sheep's clothing," and (2) since 1980, minority appointees are more extreme than party line appointees, evidently a function of vote-trading and batching in the nomination process.<sup>51</sup>

#### IV. STATISTICAL APPROACH

While most analyses of expert surveys present raw summary statistics, CL convincingly show that IRT statistical adjustments can address a potential threat to survey findings, namely, systematic differences amongst experts.<sup>52</sup> As demonstrated below, such statistical analysis has the major benefit of detecting and correcting ratings manipulation and respondent error.

<sup>47.</sup> See Ho, supra note 22, at 11–18. The survey was deployed prior to when that study became publicly available, eliminating any chance of contamination of expert opinions by vote-based measures.

<sup>48.</sup> Id. at 11-14.

<sup>49.</sup> Id. at 12.

<sup>50.</sup> Id. at 1-4.

<sup>51.</sup> Id. at 26-29.

<sup>52.</sup> See Clinton & Lewis, supra note 14, at 10-11.

Appendix A presents the formal details of the models, and I only sketch the salient intuition here. Both models used for expert and voting data are ordinal IRT models, each of which differs to account for the specifics of the data.

Experts are assumed to have a common conception of the single underlying dimension. The survey model differs from raw statistics in that it accounts for two types of inter-rater differences. First, raters may generally locate the scale differently, centering it, for example, around 4 (conservative) rather than 3 (moderate).<sup>53</sup> Second, raters may have varying levels of expertise. Rather than weighting raters equally, the model estimates a "discrimination" parameter that corresponds to how well the rater is able to discriminate, or distinguish, between commissioners in the relevant dimension. All raters can therefore have a differential impact on the ideal points.

As to the voting model, a single dimension is again assumed to characterize voting differences between the commissioners. Similar to rater adjustments in the expert survey, differences across proceedings are modeled by two parameters: (1) the amount of dissensus a case generates, and (2) the degree to which voting differences are driven by the underlying dimension. Intuitively, the model provides one summary, based on voting patterns, of underlying differences between commissioners.<sup>54</sup>

#### V. Results

#### A. Commissioner Ideal Points from Expert Survey

Figure 3 plots mean expert ratings on the x-axis against statistically adjusted ideal points from the survey on the y-axis. Interestingly, the

<sup>53.</sup> See Appendix B.3.

<sup>54.</sup> For elaboration on the intuition behind this measurement approach, see Daniel E. Ho & Kevin M. Quinn, How Not to Lie with Judicial Votes: Misconceptions, Measurement, and Models, 98 CAL. L. REV. (forthcoming 2010) (manuscript on file with author); Daniel E. Ho & Kevin M. Quinn, Did a Switch in Time Save Nine?, 2 J. LEGAL. ANAL. (forthcoming 2010) (manuscript on file with author). For applications, see Ho, supra note 22, at 18-31 (assessing the impact of statutory partisan requirements); Daniel E. Ho & Kevin M. Quinn, Improving the Presentation and Interpretation of Online Ratings Data with Model-Based Figures, 62 Am. Statistician 279, 280-81 (2008) (developing graphical techniques for online ratings data) [hereinafter Ho & Quinn, Improving Presentation]; Daniel E. Ho & Kevin M. Quinn, Measuring Explicit Political Positions of Media, 3 Q.J. Pol. Sci. 353, 354-56 (2008) (studying the express political positions of media); Ho & Quinn, supra note 16, 829-41 (examining whether media consolidation is associated with a reduction in viewpoint diversity); Daniel E. Ho & Erica L. Ross, Did Liberal Justices Invent the Standing Doctrine? An Empirical Study of the Evolution of Standing, 1921-2006, 62 STAN. L. REV. (forthcoming 2010) (manuscript on file with the author) (assessing the thesis that liberal justices invented the standing doctrine to insulate administrative agencies from judicial review).

### FIGURE 3 SURVEY RESPONSES

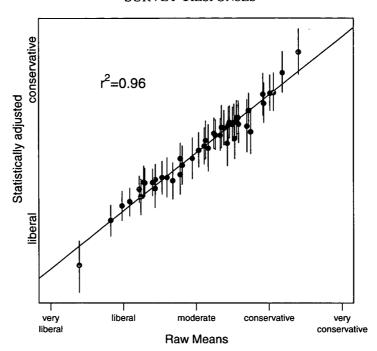


Figure 3 presents raw means of survey responses on the x-axis and IRT-adjusted ideal points on the y-axis. The vertical segments indicate 95% credible intervals from statistical adjustment, while dots present posterior medians. The approximate 45-degree line represents the linear least squares fit of the statistically adjusted score against the raw mean. This Figure shows that IRT adjustment has little impact on estimates.

adjustment yields few differences in ideal point estimates, as indicated by the high  $R^2$  from a simple linear fit of posterior medians of ideal points against mean ratings. These results are consistent with CL's finding that the correlation coefficient ranges from 0.939 to 0.999 across several model specifications.<sup>55</sup> The results also suggest that most standard results from expert surveys may not be threatened by inter-rater differences. For the remainder of the Article, I will continue to use ideal points from the model, but findings are substantially the same for both measures.

The statistical adjustment nonetheless has several virtues. First, the model facilitates comparisons with ideal points from vote-based methods. Because the amount of information known about ideal points is assumed to be the same for both models a priori (see Appendix A),

we obtain a rough sense of the degree of learning from each data source.<sup>56</sup> Second, the model facilitates detection of strategic rating behavior and directly discounts naïve forms of ratings manipulation. I illustrate both points below.

The top panel of Figure 4 plots posterior median ideal points for all 46 Commissioners, with 95% credible intervals (to represent uncertainty). Gray and black dots correspond to whether the first appointing president was a Democrat or a Republican, respectively. Gray and black intervals and names correspond to whether the commissioner is a Democrat or Republican, respectively. Commissioners separate very cleanly according to their own partisan affiliation, but presidential affiliation has virtually no predictive power over ideal points. Bold names indicate that Republican chairs appear to be considerably more conservative than Republican non-chairs. Six of the eight most conservative Commissioners served as chairs. Interestingly, this does not appear to be the case for Democratic chairs, including centrist commissioners such as Quello and more liberal commissioners such as Hundt.

The bottom panel further illustrates the chair result by plotting the conditional marginal (posterior) distributions of viewpoints. With the exception of Quello, who contributed to Nixon's campaign, Democratic chairs appear to be drawn from the center of the distribution of Democrats. The black lines show that the density shifts substantially to the right for Republican chairs, even relative to non-chair Republicans. Of course, the response rate is higher for chairs, a source of variability that the IRT approach takes directly into account, thereby facilitating comparisons of substantive interest. The probability that the median non-chair Republican is more conservative than the median Republican chair is effectively 100%.

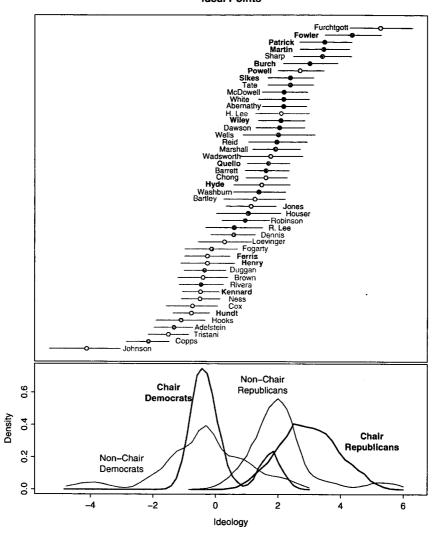
#### B. Comparison to Vote-Based Measures

How do expert- and vote-based measures compare? The left panel of Figure 5 plots 90% credible ellipses for all commissioners, with the x-axis representing expert survey-based ideal points and the y-axis representing vote-based ideal points. Vote-based ideal points are much more unevenly distributed than survey-based ideal points, with the large majority of ideal points concentrated around the origin and a number of prominent outliers, such as Harold Furchtgott-Roth—"by far the most conservative commissioner on the Federal Communica-

<sup>56.</sup> Of course, the parameters are different, so this facial comparability may not accord with substantively similar assumptions.

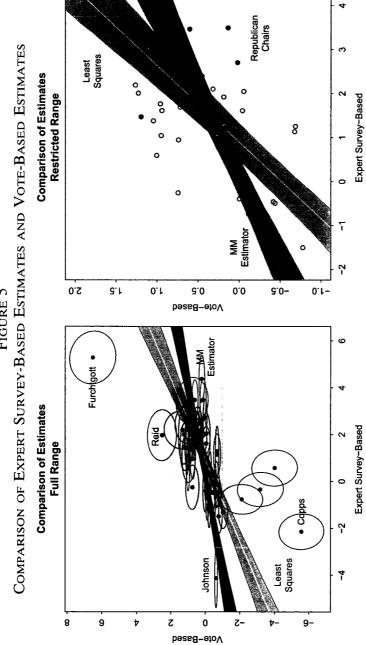
## FIGURE 4 ESTIMATES OF REGULATORY PREFERENCES OF FCC COMMISSIONERS

#### **Ideal Points**



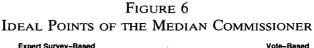
Commissioners are sorted by posterior median ideal points. Black and gray dots indicate whether the first appointing president was a Republican or a Democrat, respectively. Black and gray 95% credible intervals and names denote the commissioner's partisan affiliation as a Democrat or Republican, respectively. Bold names indicate that a commissioner served as chair, excluding interim chairs. The top panel shows that Republican chairs are substantially more conservative than Republican non-chair commissioners. The bottom panel calculates conditional marginal densities, showing that the distribution of Republican chairs is appreciably to the right of Republican non-chairs, while that of Democratic chairs remains in the center of Democratic non-chairs.

FIGURE 5



light gray lines represent confidence intervals for fitted least squares and MM estimator predictions from draws of the joint posterior distribution. The slope is positive for all draws. Filled dots in the right panel denote Republican chairs, except for Fowler who is outside of the constrained range. Figure 5 presents the correlation of expert survey-based estimates on x-axis and vote-based estimates on y-axis. Ellipses represent 90% credible intervals. The left panel presents all 46 commissioners and the right panel presents commissioners over a restricted range, marked by the gray box in the left panel. Dark and

tions Commission"<sup>57</sup>—and Michael Copps—the "conscience of the FCC" and once a "one-man band banging the drum for a national debate" on media concentration rules.<sup>58</sup> According to experts, the outlier was Nicholas Johnson, an outspoken liberal and the only Commissioner ever to appear on the cover of *Rolling Stone*,<sup>59</sup> who, to be sure, was a liberal according to voting patterns but not on the outer fringes. The right panel of Figure 5 restricts the range to the gray box in order to plot points obscured by the range of the left panel. Within this constrained range, the positive association clearly continues to hold.



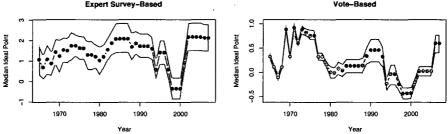


Figure 6 presents the median commissioner over time, with 95% credible interval, by expert survey in the left panel and voting records in the right panel.

To formally assess the in-sample relationship between these two measures, I use a simple linear fit and a robust MM estimator. The latter ensures that contaminated data points do not drive inferences about the association, which is a concern given the acute outliers.<sup>60</sup> To account for uncertainty in the ideal points, I fit lines to 1,000 posterior draws of ideal points. As depicted by the dark and light gray segments in Figure 5, in which intervals from the same models are plotted in left and right panels, slopes in the simulations are positive, showing that there is a strong positive association between the two measures.

While there is a strong aggregate relationship between the two measures, they are by no means identical. One of the consistent differ-

<sup>57.</sup> Ian Stokell, Newsbytes Telecom Week in Review, Newsbytes PM, Feb. 2, 2001, available at 2001 WLNR 12097355.

<sup>58.</sup> Catherine Yang, The FCC's Loner Is No Longer So Lonely, Bus. Week, Mar. 24, 2003, at 78.

<sup>59.</sup> See ROLLING STONE, Apr. 1, 1971.

<sup>60.</sup> See Victor J. Yohai, High Breakdown-Point and High Efficiency Robust Estimates for Regression, 15 Annals Stat. 642, 642 (1987).

ences between the expert- and vote-based measures is that Republican chairs are estimated to be more conservative by experts than votes. This can be seen by the filled dots in the right panel of Figure 5: while experts rate these chairs as consistently more conservative, they are in the mid-range of Republican ideal points according to vote-based measures. To illustrate aggregate trends, Figure 6 plots the ideal points of the median commissioner over time, showing that broad historical trends are comparable, but with some considerable differences. The Reagan Commission is estimated to be more conservative by experts, while the Nixon Commission is estimated to be more conservative by votes. Credible intervals are also substantially wider for the expert measures, making it hard to discern differences prior to 1980.

#### VI. METHODOLOGICAL LESSONS

While this Article corroborates the use of expert surveys to measure broad regulatory trends, it also points to specific methodological limitations of the approach. What specific lessons can we draw from this unique comparison of expert surveys and voting records?

#### A. Expert Interpretation of Dimension

Expert interpretations of the policy dimension may not accord with those of social science. In responding to the survey, several experts expressed difficulty in interpreting whether a commissioner is "liberal" as opposed to "conservative." Figure 7 presents half a dozen comments raising this concern. In contrast, vote-based ideal points do not require directional coding of votes although some prior information is required to identify the space.<sup>61</sup>

The comments in Figure 7 nonetheless stand in contrast to the 78 respondents, the large majority of which used the scale similarly. Raters answering the survey in fact appear to share a common conception of the dimension. Of course, the six comments may characterize a larger fraction of the 162 nonresponses. Nonetheless, the statistical methods employed here are well-suited for accounting for differences in interpretation. The model essentially provides the underlying dimension that best explains variation in ratings, and it facilitates assessment of whether ratings behavior is consistent across respondents.

<sup>61.</sup> See Joseph Bafumi et al., Practical Issues in Implementing and Understanding Bayesian Ideal Point Estimation, 13 Pol. Analysis 171, 177-78 (2005); Clinton et al., supra note 16, at 356-57.

## FIGURE 7 CONCERNS OF SURVEY RESPONDENTS

"The conservative/liberal labels don't work well when you have to combine economic and speech issues."

"Liberal and conservative don't really apply to FCC Commissioners."

"The issues do not generally break down between traditional 'liberal' or 'conservative' which makes summing up the career difficult."

"Twenty years ago I thought I knew what the terms 'liberal' and 'conservative' meant. I'm not so sure today."

"I have to say that I could not bring myself to rate them along strictly liberal-conservative lines. Call me too much of an academic, but there's just too much nuance to offer such a rating."

"I confess I don't know what 'conservative' and 'liberal' mean in this context . . . I would have had a somewhat easier time of it if you had asked me to rate commissioners on a spectrum from 'antiregulatory' to 'interventionist.'"

Voluntary responses to the survey that address measurement and dimensionality of regulatory preferences.

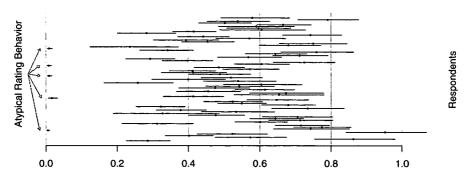
#### B. Tainted Ratings

Even when ratings are submitted, a small fraction of raters fails to distinguish commissioners very well, misinterprets the scale, or may attempt to manipulate the ratings. Expert surveys in particular may heighten the threat of respondent manipulation and misinterpretation because experts may have a stake in outcomes and very limited time to answer questions. To illustrate, Figure 8 plots 50% credibility intervals for discrimination parameters of respondents (in random order). If raters systematically and meaningfully discriminate between commissioners, these intervals should be far away from the origin. While that is the case for the majority of raters, five raters exhibit serious error. Examining their votes, it appears clear that these five experts reversed the scale.

To examine these tainted ratings in more detail, Figure 9 plots all ratings that were submitted by four selected raters. The x-axis presents estimated ideal points for commissioners from all expert data, and the y-axis presents the submitted ratings (randomly jittered for visibility). The panel on the top left presents a representative rater with a positive discrimination parameter. The lower left hollow dot, for example, represents the rating for Nicholas Johnson. The positive

## FIGURE 8 DISCRIMINATION PARAMETERS FOR RESPONDENTS IN RANDOM ORDER

#### **Discrimination Parameter**



For five respondents, the discrimination parameter suggests significantly different rating behavior, indicating survey misinterpretation or strategic behavior.

correlation between ideal points and submitted ratings shows that this rater is a representative discriminating rater.

The top right panel of Figure 9 presents a discriminating rater who submitted one rating that is a severe outlier, rating Furchtgott-Roth as "very liberal." This may be due to misinterpretation of the scale (i.e., interpreting "very liberal" as a classical libertarian position). More likely, because no other raters interpreted the scale as such, it represents an attempt to game the system by making Furchtgott-Roth appear less extreme. This relatively sophisticated rating behavior moderates Furchtgott-Roth's ideal point both in conventional and statistical analyses.

The bottom left panel of Figure 9 presents a rater who discriminated but appears to have confused the direction of the codings, representative of the five raters with discrimination parameters close to the origin in the left of Figure 8. This is likely due to the fact that the design of the 1–5 rating system, which was constrained by the infrastructure of the web survey company, is not as intuitive as desirable. Finally, the bottom right panel of Figure 9 plots ratings for a similarly confused rater who nonetheless rated Hundt—evidently correctly—as "very liberal," which again appears to be evidence of ratings manipulation. The virtue of the statistical approach is that we can easily detect such outliers. Extremely naïve forms of ratings manipulation, such as submitting only one rating, reversing the scale, or submitting the same ratings for all Commissioners are trivially addressed by the

statistical model, as long as only a small fraction of respondents engage in such behavior.<sup>62</sup>

To investigate whether rating behavior is correlated with the background of raters, Figure 10 plots the distribution of median IRT parameters by expert background. One might expect that experts with FCC backgrounds may be most likely to engage in strategic rating behavior or that some subgroups center the scale differently, but rating differences do not appear to be driven by these subgroups.

In short, although statistical adjustments do not substantially change raw descriptive measures, they improve the analysis of expert surveys by detecting and correcting for respondent manipulation and confusion.

#### C. Learning What You Pay For

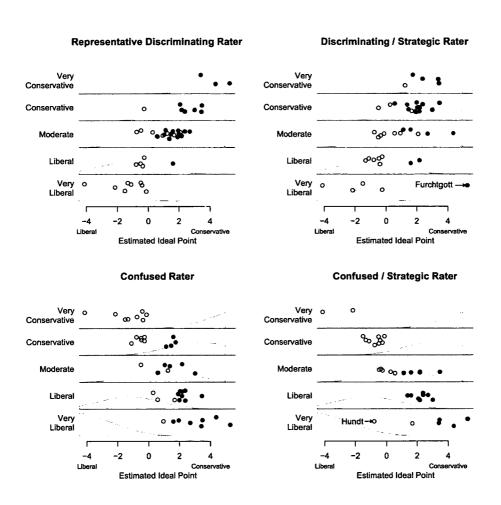
While expert surveys may be considerably cheaper, there is a clear tradeoff in terms of how much one can learn. The ultimate credibility of ideal points depends on how much information exists to reveal preferences. The advantage of some institutions, such as Congress or the Supreme Court, is that voting is plentiful and heterogeneous. In other institutions, however, votes, to the degree they exist at all, may encompass only a small portion of the work product, and even formal votes may be characterized by scant dissent because positions are negotiated and incorporated into decisions prior to the final vote. Different norms about prior bargaining may explain the drastic differences in dissent rates across regulatory commissions.<sup>63</sup> For those institutions for which voting data are scant, surveys may provide one of the only means forward. For the FCC, however, much voting data are readily available, bearing the potential to identify ideal points with considerably more precision than expert survey data. Figure 11 illustrates this by plotting credible interval lengths for vote-based and expert-based ideal points in the top left and right panels, respectively, and plotting ideal points against each other in the bottom panel.

Because the prior information on ideal points is assumed to be the same for both models, we can interpret interval lengths as representing the degree to which we have learned from the data. Intervals are significantly smaller for 40 out of 46 commissioners based on voting records. Further, expert intervals increase significantly for commissioners serving at earlier periods, as depicted by the middle panel. For historical study and the study of individual commissioner behavior,

<sup>62.</sup> See Ho & Quinn, Improving Presentation, supra note 54, at 284-86.

<sup>63.</sup> See Ho, supra note 22, at 26-29.

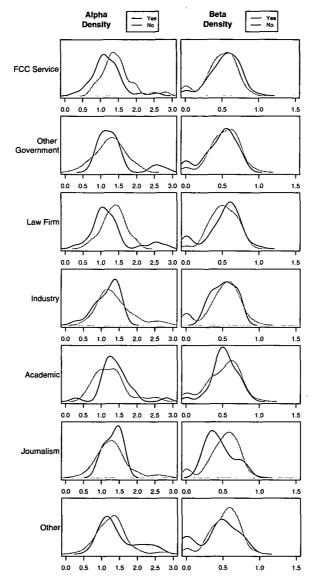
## FIGURE 9 RATING BEHAVIOR FOR FOUR SELECTED RESPONDENTS



Each panel plots all ratings submitted by one respondent. The y-axis represents the five response categories, with ratings randomly jittered for visibility within each category, and the x-axis presents the median ideal point of each respective commissioner. Filled and hollow dots correspond to Republican and Democratic commissioners, respectively. The five gray contours represent probability densities of respective ratings, using the median parameter across simulations and respondents. The top left panel presents a "discriminating" rater who is representative of the large majority of respondents. The top right panel plots ratings by a discriminating rater who may have been attempting to manipulate ratings by rating Furchtgott-Roth, one of the most conservative commissioners of the FCC, as very liberal. The bottom panels represent confused raters who appear to have gotten the scale reversed, and whose discrimination parameter is effectively zero. The bottom right rater may have been attempting to manipulate Hundt's rating.

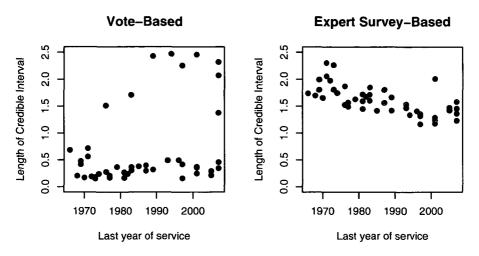
Figure 10

Density of Median IRT Parameters by Communications
Background of Respondents

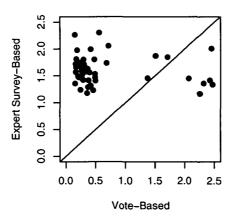


The left column presents the parameter for the centrality of the scale, and the right column presents the discrimination parameter. Dark lines represent distributions for those in the subgroup, a nonexclusive category, while gray lines represent those excluded from that subgroup. This figure demonstrates that rating behavior appears comparable across different types of raters.

FIGURE 11 INTERVAL LENGTHS



#### **Comparison of Interval Lengths**



This figure plots interval lengths of vote-based ideal points in the top left panel, of expert survey-based ideal points in the top right panel, and compares the two in the bottom panel. With the exception of 6 commissioners, intervals are substantially shorter for vote-based measures. Expert intervals increase significantly for commissioners serving at earlier periods.

there may be few substitutes for large data collection efforts. That said, expert- and vote-based approaches are by no means rivals, and one promising avenue may be to combine information from both sources.

#### D. Survey Challenges Unique to Experts

This case study sheds some light on concerns that are in many respects unique to expert surveys. Experts may have personal interests that would be served by manipulating answers, as empirically documented in the right panels of Figure 9. Experts also face significant time constraints, making it difficult to gather a substantial amount of information from the survey and causing fairly high nonresponse rates. Because anonymity is crucial for high-level actors, validation, nonresponse analysis, and pre-testing of the survey become difficult. One might question, for example, whether commissioners themselves should have been included as experts or whether Hundt's endorsement might bias results. In conventional survey settings, the standard advice would be to test and validate instruments, but that remains very difficult to do without contaminating the small expert pool.

#### VII. CONCLUSION: THE POWER OF THE CHAIR

Perhaps the most promising result of this Article is the finding that expert surveys may uncover aspects of agency decision making that voting records fail to capture. To the best of my knowledge, this Article provides the first systematic evidence that chairs matter.<sup>64</sup>

Of course the validity of the finding that Republican chairs tend to be more extreme than Democratic chairs depends on the validity of the survey. Because the survey was sponsored by Reed Hundt, respondents may have been more liberal and therefore more prone to make fine-tuned distinctions between Democratic commissioners, while falsely attributing the output of the Commission to its leader when under Republican control. Expert perceptual biases may therefore taint results.<sup>65</sup> For example, experts generally rate Charlotte Reid, who according to votes is the second most conservative commissioner, as a moderate. Yet according to some scholars, Reid was "slightly to the right of Marie Antoinette." Part of the difference in measures may stem from Reid's lackluster interest in the FCC, a high absence rate, and lack of telecommunications background, giving her

<sup>64.</sup> Cf. Moe, supra note 24, at 1101 (observing that one of the key ways a president exercises control over an agency is through his appointment of a chair); Terry M. Moe, Regulatory Performance and Presidential Administration, 26 Am. J. Pol. Sci. 197, 198 (1982) (finding agency shifts early in new presidential administrations, approximately when new chairs are appointed); B. Dan Wood & Richard W. Waterman, The Dynamics of Political Control of the Bureaucracy, 85 Am. Pol. Sci. Rev. 801, 810–16 (1991) (noticing shifts in agency policy direction when new chairs are appointed).

<sup>65.</sup> On the other hand, the Reed Hundt effect may mask Democratic chair extremism.

<sup>66.</sup> Carol J. Weisenberger, Women of the FCC: Activists or Tokens?, 21 Bus. & Econ. Hist. 192, 194 (1992) (quoting Chicago Daily News).

little visibility amongst FCC experts.<sup>67</sup> Conversely, while experts may have incorporated Nicholas Johnson's intensity of preferences, such ratings may also be skewed by his colorful personal style.

If the survey is valid, however, this Article provides considerable insight into the understanding of one aspect of institutional design. First, it helps to explain legislative wrangling over the nature of the relationship of the chair to other commissioners and to the President. James Landis, one of the founding fathers of the modern study of administrative law, famously called for increasing the power of chairs of regulatory commissions,68 and similar calls for centralization and streamlining have continued over the years.<sup>69</sup> President Harry Truman presented a series of reorganization plans in 1950 that (1) statutorily granted more authority to the chair to appoint and supervise personnel and to oversee agency expenditures, and (2) transferred the power to designate the chair typically from the agency to the President.<sup>70</sup> These plans were passed for the FTC, FPC, and SEC, but they failed for the ICC, FCC, and NLRB, the latter two for which, interestingly, the President already possessed the power to designate the chair.<sup>71</sup> One senator charged that the plan would set up "one-man agencies" subject to direct control from the Executive.<sup>72</sup> President John F. Kennedy aimed to further extend the power of the chair to include the power to delegate work to commission personnel, including other commissioners.<sup>73</sup> These reorganization plans passed for the

<sup>67.</sup> See id. at 194-95.

<sup>68.</sup> See Reorganization Plans Considered by Landis, WASH. Post, Feb. 10, 1961, at A6.

<sup>69.</sup> See Randolph J. May, The FCC's Tumultuous Year 2003: An Essay on an Opportunity for Institutional Agency Reform, 56 Admin. L. Rev. 1307, 1318–24 (2004) (calling for reform of the FCC); Shooshan, supra note 25, 644–54 (arguing that the FCC should be restructured with a single administrator in the place of the multi-member Commission); Russ Taylor, Rethinking Reform of the FCC: A Reply to Randolph May, 58 Fed. Comm. L.J. 263, 275–78 (2006) (arguing that contextual factors should be taken into account when considering structural reform of the FCC).

<sup>70.</sup> See Breger & Edles, supra note 25, at 1166-67; Christopher S. Yoo, Steven G. Calabresi & Anthony J. Colangelo, The Unitary Executive in the Modern Era, 1945-2004, 90 Iowa L. Rev. 601, 617-18 (2005).

<sup>71.</sup> See Robert C. Albright, Truman Plans to Reorganize Agencies Filed, Wash. Post, Mar. 14, 1950, at 1; Associated Press, Senate Acts Today on Hoover Plans, Wash. Post, May 22, 1950, at 1; Regulatory Heads, Wash. Post, May 26, 1950, at 22; Revamping of FTC and FPC Approved; Proposals on Other Agencies up Today, Wash. Post, May 23, 1950, at 1; Senate Kills ICC and FCC Revamping, Wash. Post, May 18, 1950, at 1.

<sup>72.</sup> Senate Kills ICC and FCC Revamping, supra note 71 (quoting Sen. Edwin C. Johnson (D. Colo.)).

<sup>73.</sup> See Text of President Kennedy's Message to Congress on the Regulatory Agencies, N.Y. Times, Apr. 14, 1961, at 12.

FTC and CAB, but failed for the FCC and SEC.<sup>74</sup> Most importantly, none of these reorganization plans would have affected the voting procedures for these commissions, corroborating this Article's finding that something was at stake beyond voting.

Second, and relatedly, this Article confirms qualitative conjectures about the power of chairs.<sup>75</sup> Chairs may exercise power via alternative channels to voting, such as supervisory authority over staff, agenda control, oversight over expenditures, and the power to represent the Commission publicly. As chair, for example, Mark Fowler openly met with Reagan White House officials to discuss telecommunications policy;<sup>76</sup> while he is estimated as relatively moderate according to voting records, experts rate him as the second most conservative Commissioner.<sup>77</sup> Formal voting studies may miss such important institutional dynamics: May, for example, documents that much of the negotiation between commissioners occurred *prior* to the formal votes on broadband sharing.<sup>78</sup> Derthick and Quirk argue that the chair dominates and bullies other commissioners into compliance.<sup>79</sup> Most broadly, these results suggest that Kevin Martin's behavior was the rule, not the exception.

At the same time, the results raise distinct questions. Were chairs truly more extreme in their outside activities than in their votes, or did chairs manage to influence outcomes internally by affecting votes of commissioners or agenda control?<sup>80</sup> Why does chair extremism ap-

<sup>74.</sup> See Senate Upholds Kennedy Plans for the F.T.C. and the C.A.B., N.Y. TIMES, June 30, 1961, at 10.

<sup>75.</sup> See, e.g., REED HUNDT, YOU SAY YOU WANT A REVOLUTION: A STORY OF INFORMATION AGE POLITICS 13 (2000) (noting that "the historical tradition of the Commission was that the chairman... made the tentative decisions on major issues"); Derthick & Quirk, supra note 25, at 86 ("Commission members tended in general to defer to the chairman."); Robinson, supra note 32, at 245 n.24 (referring to the "special powers and prerogatives of agency chairmen"); Strauss, supra note 25, at 591 (arguing that "chairmen . . . dominate commission policymaking"); Paul R. Verkuil, The Purposes and Limits of Independent Agencies, 1988 DUKE L.J. 257, 265 (noting that although the "enhanced power of the Chair . . . mak[es] collegial agencies more effective policy instruments . . . . it undermines collegiality"); Welborn, supra note 29, at 34 (quoting a former FCC chairman as saying, "The chairman usually gets what he wants"); Wiley, supra note 25, at 282-84 (describing interaction between Congress and chair of FCC); Richard E. Wiley, The "Ins and Outs" of Rulemaking: Lessons from Government and K Street, 57 ADMIN. L. REV. 951, 955 (2005) (arguing that rulemaking proceedings provide agency chairs with a chance to impose their policy agendas); Zarkin & Zarkin, supra note 28, at 55 (describing the close relationships between presidents and the chairs they appoint, implying that the chair has greater influence through which the Executive can dictate policy).

<sup>76.</sup> See Krasnow et al., supra note 31, at 67.

<sup>77.</sup> See supra Figure 4.

<sup>78.</sup> See May, supra note 69, at 1314.

<sup>79.</sup> See Derthick & Quirk, supra note 25, at 88.

<sup>80.</sup> See Joshua D. Clinton, Lawmaking and Roll Calls, 69 J. Pol. 457, 457-58 (2007).

pear to be asymmetric across parties? If the President is generally more centrist, why would a chair designated by the President be more extreme than other commissioners? Is the result driven by presidential transitions? Fortunately, ideal points provide one potential avenue to address these questions, such as by comparing presidential policy positions to those of the commissioners.

Questions of institutional design hinge critically on empirical assumptions. This Article evaluates one way forward for measuring agency preferences when votes may be difficult to collect or nonexistent. Although these findings do not directly speak to loftier effects of chair power on accountability and responsiveness, they confirm that leadership on regulatory commissions appears to matter.

#### APPENDIX

#### A. Statistical Methods

This appendix outlines the statistical methods used to analyze the expert survey data in Subsection 1 and the voting data in Subsection 2. Both models are forms of ordinal item response models,<sup>81</sup> where the quantity of interest is the latent regulatory ideology.

#### 1. Survey

The model used to analyze the survey is the same as that adapted by Ho and Quinn.<sup>82</sup> Let  $r = \{1, ..., R\}$  denote the set of respondents to the survey and  $c = \{1, ..., C\}$  denote the set of commissioners. Let Y be an  $R \times C$  matrix, where:

$$Y_{rc} = \begin{cases} 1 & \text{if } r \text{ rated } c \text{ as "very liberal"} \\ 2 & \text{if } r \text{ rated } c \text{ as "liberal"} \\ 3 & \text{if } r \text{ rated } c \text{ as "moderate"} \\ 4 & \text{if } r \text{ rated } c \text{ as "conservative"} \\ 5 & \text{if } r \text{ rated } c \text{ as "very conservative"} \end{cases}$$

and  $Y_{rc}$  is missing when r did not submit a rating. The observation mechanism is an ordered probit:

$$P(Y_{rc} = k) = \Phi(\gamma_{k+1} - \mu_{rc}) - \Phi(\gamma_k - \mu_{rc}),$$

where  $\gamma$  is a vector of cutpoints,  $k \in \{1,2,3,4,5\}$ ,  $\Phi 0$  is the standard normal CDF,  $\gamma_1 \equiv -\infty$ ,  $\gamma_2 \equiv 0$ , and  $\gamma_5 \equiv \infty$ . The systematic component  $\mu_{rc}$  is

$$\mu_{rc} = \alpha_r + \beta_r \phi_c, \tag{1}$$

where  $\alpha_r$  represents the centrality of r's internal scale, which accounts for whether a respondent is particularly liberal (and thereby inclined to rate all commissioners as relatively conservative), or vice versa.  $\beta_r$  represents how well r distinguishes between conservative and liberal commissioners. Expert input is hence weighted according to relative ability to distinguish between commissioners, whereas simple statistics

<sup>81.</sup> See, e.g., Valen E. Johnson & James H. Albert, Ordinal Data Modeling 126-57 (1999); Kevin M. Quinn, Bayesian Factor Analysis for Mixed Ordinal and Continuous Responses, 12 Pol. Analysis 338, 339-42 (2004); Shawn Treier & Simon Jackman, Democracy As a Latent Variable, 52 Am. J. Pol. Sci. 201, 204-06 (2008). For overviews of item response theoretic models, see Bafumi et al., supra note 61, at 171-79; Clinton et al., supra note 16, at 355-59.

<sup>82.</sup> See Daniel E. Ho & Kevin M. Quinn, Measuring Explicit Political Positions of Media, 3 Q.J. Pol. Sci. 353, 361-63 (2008).

weight all experts equally. The quantity  $\phi_c$  represents the latent ideology of c. The priors are

$$\alpha_r \sim N(1,1)$$
  
 $\beta_r \sim N_+(-5,20)$   
 $\phi_r \sim N(0,1)$ 

where  $N_+$  indicates a truncated normal. Constraining  $\beta$  to be positive forces higher ratings to load on positively into the latent space. Accordingly, we can interpret positive values of  $\phi$  to correspond to conservative commissioners and negative values to correspond to liberal commissioners.  $\gamma$  has an improper uniform prior. I adopt a Bayesian approach to fit the model, simulating from the posterior distribution using Markov Chain Monte Carlo.

#### 2. Voting

The model used to analyze the voting data stems from a prior analysis.<sup>83</sup> It differs from the survey model in several principal respects. First, the primitive units are cases—adjudications and rulemakings—instead of respondents. Let  $i = \{1, \ldots, N\}$  represent nonunanimous cases, on which a subset of commissioners indexed by  $c = \{1, \ldots, C\}$  participates. Second, outcomes are ordered but *non-directional*:

$$Y_{ic} = \begin{cases} 1 & \text{if } c \text{ voted for the majority} \\ 2 & \text{if } c \text{ concurred} \\ 3 & \text{if } c \text{ partially dissented} \\ 4 & \text{if } c \text{ dissented in toto.} \end{cases}$$

Third, while the observation mechanism is still an ordered probit, cutpoints are not pooled:

$$P(Y_{ic} = k) = \Phi(\gamma_{k+1}^{i} - \mu_{ic}) - \Phi(\gamma_{k}^{i} - \mu_{ic}),$$

so that  $\gamma_k^i$  denotes the  $k^{\text{th}}$  cutpoint for the case i, but with the same identification constraints on  $\gamma$ . The systematic component  $\mu_{ic}$  is the same:

$$\mu_{ic} = \Lambda_{i1} + \Lambda_{i2} \phi_{c.}, \qquad (2)$$

where  $\phi$  is the quantity of interest. As the primitive units and outcomes are votes on cases, the elements of  $\Lambda$  have a different interpretation than the analogous parameters in Equation 1. Specifically,  $\Lambda_{i1}$ 

represents the likelihood that case i will generate disagreement between the commissioners.  $\Lambda_{i2}$  models to what degree disagreement in case i is driven by latent ideal points  $\phi$  of the commissioners. Fourth, because cutpoints are not pooled and four unique votes are not observed for every case, the model is a mixture of dichotomous, trichotomous, and quadrichotomous ordinal indicators.<sup>84</sup> The mixture is modeled by placing appropriate restrictions on  $\gamma$ . Last, as outcomes are not directionally coded, I use commissioner-level information to fix ideal points:<sup>85</sup>

$$\phi_c \sim N(\delta_1 A_c + \delta_2 P_c, 1)$$
  
 $\delta_1 \sim N_+(0, 25)$   
 $\delta_2 \sim N(0, 25),$ 

where  $A_c$  equals 1 if the affiliation of the commissioner is Republican and -1 if Democratic, and  $P_c$  equals 1 if the initial appointing president  $(P_c)$  is Republican and -1 if Democratic. Constraining  $\delta_1$  to be positive fixes the latent dimension so that higher positive values of  $\phi$  indicate more conservative ideal points. Priors for remaining parameters are

$$\begin{array}{lll} \Lambda ... & \sim N(0,4) \\ \gamma_3^{i:\#(Y_i) \in \{3,4\}} & \sim LN(1,1) \\ \gamma_4^{i:\#(Y_i) = 4} - \gamma_3^i & \sim LN(1,1), \end{array}$$

where LN is the log-normal distribution and  $\#(Y_i)$  indicates the number of unique votes in  $Y_i$ .

<sup>84.</sup> See Quinn, supra note 81, at 339.

<sup>85.</sup> See Bafumi et al., supra note 61, at 176-78.

#### B. Survey

#### 1. Invitation to Participate

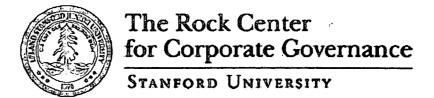
The email that was sent to experts to solicit participation reads as follows:

From: Reed Hundt [mailto:fcc-survey@law.stanford.edu] Subject: Message from Reed Hundt Dear [Dr./Prof./Mr./Ms./Commissioner \_\_\_\_\_], The Arthur and Toni Rembe Rock Center for Corporate Governance at Stanford University is sponsoring an academic survey on the regulatory philosophies of commissioners of the Federal Communications Commission. As you are one of the world's leading experts in telecommunications, we would like your input. On average, the survey will take only 2 minutes to complete. All information is strictly anonymous and will be used solely for academic purposes. As former chairman of the FCC, I have completed the survey myself, and on behalf of the Rock Center would like to encourage and invite you to participate in what I believe to be an important and worthwhile study. To participate, please go to: http://fcc.stanford.edu/ Please do not respond to this email with anything unrelated to the Stanford FCC survey. We greatly appreciate your help with the study. Best wishes, Reed E. Hundt

FCC Chairman, 1993-1997

#### 2. Survey Homepage

The survey homepage is presented below:



Dear Sir / Madam,

The Arthur and Toni Rembe Rock Center for Corporate Governance at Stanford University is sponsoring an academic survey on the regulatory philosophies of commissioners of the Federal Communications Commission. The broader academic project will also examine the FCC appointments process over the last 40 years.

As you are one of the world's leading experts in telecommunications, we would like your input. On average, the survey will take only 2 minutes to complete. All information is strictly anonymous and will be used solely for academic purposes—no personal data on respondents is in any way collected or retained. As former chairman of the FCC, I have completed the survey myself, and on behalf of the Rock Center would like to encourage and invite you to participate in what I believe to be an important and worthwhile study.

Best wishes,

Reed E. Hundt FCC Chairman, 1993-1997

Start Survey

If you have any questions, please feel free to contact fcc-survey@law.stanford.edu.

#### 3. Survey Instrument

The actual survey reads as follows:



#### **Federal Communications Commission Survey**

There are only three different questions to this survey. The second question

varies in length based on your FCC knowledge. The survey should take about 2 minutes to complete. Please indicate the background of your telecommunications expertise (check all that apply): Other government service Law firm Industry Academic research Journalism Other Please rate on a scale of 1 to 5, from "liberal" to "conservative," the regulatory philosophies of the following FCC Commissioners. Please provide ratings only for commissioners for whom you possess sufficient knowledge. Note: The commissioners are listed in reverse chronological order of FCC service. Rows can be left blank — e.g., if you only know about 5 commissioners, you only need to click on 5 answers. The N/A field is provided only if you mistakenty check a rating. 1 = very liberal 2 = liberal 3 = moderate 4 = conservative 5 = very conservative N/A = check only in case of mistaken rating 5 N/A Robert M. McDowell (2006-07) (2) (4) **(5)** Deborah Taylor Tate (2006-07) 4 5 2 **3** 

Jonathan S. Adelstein (2002-07)

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