ARTICLES

Supreme Court Voting Behavior: 1997 Term

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I. Introduction

This Study, the thirteenth in a series,¹ tabulates and analyzes the voting behavior of the United States Supreme Court during the 1997 Term.² The analysis is designed to determine whether individual Justices and the Court as a whole are voting more "conservatively," more "liberally," or about the same as compared with past Terms. As in politics, whether or not a judicial trend is "conservative" or "liberal" often lies in the eye of the beholder. A lawyer for the American Civil Liberties Union could well paint an ideological picture of the Court far different from one sketched by a lawyer for Americans United For Life.

This Study attempts to remove this subjectivity by applying the following consistent classification scheme to ten categories of cases across time: "conservative" votes are those that favor an assertion of governmental power, while "liberal" votes are those that favor a claim

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^{1.} Professor Robert E. Riggs began this study with Supreme Court Voting Behavior: 1986 Term, 2 B.Y.U. J. Pub. L. 15 (1988). Professor Richard G. Wilkins continued the study in Supreme Court Voting Behavior: 1991 Term, 7 B.Y.U. J. Pub. L. 1 (1992) [hereinafter 1991 Study]. The last four studies, analyzing the 1993, 1994, 1995, and 1996 terms, were published in the Hastings Const. L.Q. See Richard G. Wilkins, et al., Supreme Court Voting Behavior: 1993 Term, 22 Hastings Const. L.Q. 269 (1995) [hereinafter 1993 Study]; Richard G. Wilkins, et al., Supreme Court Voting Behavior: 1994 Term, 23 Hastings Const. L.Q. 1 (1995) [hereinafter 1994 Study]; Richard G. Wilkins, et al., Supreme Court Voting Behavior: 1995 Term, 24 Hastings Const. L.Q. 1 (1996) [hereinafter 1995 Study]; Richard G. Wilkins, et al., Supreme Court Voting Behavior: 1996 Term, 25 Hastings Const. L.Q. 35 (1997) [hereinafter 1996 Study].

^{2.} The 1997 Term covers decisions made from October 1997 to July 1998.

of individual liberty.³ By tracking the Term-to-Term conservative or liberal changes in the voting patterns of individual Justices and the Court as a whole across these categories of cases,⁴ and by applying standard statistical tests to the resulting data,⁵ this study attempts to provide reliable information regarding the current ideological posture of the court and its members, as well as conclusions and predictions regarding its past and future trends. Whether any statistical study of a process as complex as judicial decision-making can *be* reliable is, of course, open to debate.⁶ But, within the limitations inherent in an attempt to "number crunch" ideology, this annual survey offers students and practitioners information useful for assessing how the Court or an individual Justice will vote in particular types of cases.

This Term's survey suggests overall liberal movement on the High Court. Only one category, focusing on state criminal cases, showed true conservative movement. On virtually every other measure, the Court is slightly more liberal this Term compared to the 1996 Term. This movement may result from a general retreat from last Term's rather conservative posture, combined with the continued uneasy balance of power in swing-vote cases. Also contributing to this Term's liberal shift may be the increased number of cases implicating issues of federalism and federal jurisdiction. In these categories, the Court consistently voted in a liberal manner, finding in favor of the United States and for the exercise of jurisdiction.

Last Term's predictive statistics met with mixed success in forecasting this Term's actual voting patterns. The Study most accurately predicted results for cases involving questions of federal jurisdiction,¹¹

^{3.} There is no single, settled definition of conservatism or liberalism. See generally M.A. RIFF, DICTIONARY OF MODERN POLITICAL IDEOLOGIES 67-73, 141-52 (1987) (discussing various possible interpretations of the terms). This Study's definitions, however, are close to the core ideals of each ideology. See id. at 67 (noting that conservatism "implies fear of sudden and violent changes, respect for established institutions and rulers, support for elites and hierarchies, and a general mistrust of theory as opposed to empirical deductions"); see also id. at 142 (asserting that "twentieth-century" liberalism is "compounded of constitutionalism; doubtful of pluralism; certain[] of a belief in the virtues of economic freedom, and less certain[] of a desire to restrict government intervention in most other aspects of life").

^{4.} See infra Data Tables 1-10.

^{5.} See infra Appendix B.

^{6.} See infra note 33.

^{7.} See generally, 1996 Study, supra note 1.

^{8.} See infra Data Table 10.

^{9.} See infra Data Table 9.

^{10.} See infra Data Table 8.

^{11.} See id.

with an average error of only about 7 percentage points per Justice. The least accurate predictions were in the First Amendment category¹² with an average error of over 63 percentage points. The magnitude of this latter error is attributable to the fact that only one case this Term presented a First Amendment issue. With respect to individual Justices, last Term's predicted scores were most accurate for Justice Scalia, with an average error of about 20 percentage points. The least accurate predictions were for Justice Kennedy with an average error of over 28 points. Here, too, the small First Amendment category sample accounted for a significant portion of the prediction error. The "Category" analysis, introduced last Term and included in the Study again this Term, indicates that six categories—state criminal cases, 13 statutory civil rights, 14 state civil cases, 15 federal jurisdiction, 16 federal criminal cases, 17 and federalism 18—are the best indicators of liberal/conservative predilections among the Justices, while the remaining categories-First Amendment¹⁹, federal civil cases²⁰, and equal protection²¹ are relatively poor indicators of the Justices' propensities.²² "Frontier" analysis, also introduced into the Study last Term, shows Justice Souter eclipsing Justice Stevens to define the Liberal frontier (due primarily to his solitary vote in favor of the claim in the only First Amendment case presented this Term) and Justice Thomas displacing Justice Rehnquist in defining the outer limit of the Conservative frontier.²³

This Study is divided into sections to make it more accessible to the reader. The precise details of the statistical analysis—as can be gleaned from a glance at the equations (and explanations) in Appendix B—are hardly the stuff of light cocktail conversations. But one need not have an advanced degree in mathematics to understand the general trends that flow from the Study's analysis. Part II gives a description of the mode of analysis employed by the Study. Part III follows with a general overview of this Term's findings. Part IV sets out

^{12.} See infra Data Table 5.

^{13.} See infra Data Table 3.

^{14.} See infra Data Table 7.

^{15.} See infra Data Table 1.

^{16.} See infra Data Table 8.

^{17.} See infra Data Table 4.

^{18.} See infra Data Table 9.

^{19.} See infra Data Table 5.

^{20.} See infra Data Table 2.

^{21.} See infra Data Table 6.

^{22.} See infra Part V.

^{23.} See infra Frontier Charts 1 and 2.

the Study's numerical tables, graphs, and statistical charts and discusses—table-by-table and chart-by-chart—the information contained in them. Parts V and VI describe the methodology (and outcome) of this year's "Category" and "Frontier" Analyses respectively. Appendices A and B detail the definitions and statistical tests employed by this Study.

II. Mode of Analysis

The Study is based on the tabulation and mathematical analysis of each Justice's votes in ten categories. Nine of the categories are based on the nature of the issues addressed (e.g., First Amendment, equal protection, etc.) or on the character of the parties involved (e.g., state or federal government litigants).²⁴ The tenth category tabulates the number of times each Justice voted with the majority in cases decided by a single, or swing, vote.

The first nine categories are designed to detect each Justice's attitude toward two broad issues underlying most Supreme Court decisions—protection of individual rights and judicial restraint. The tabulation of votes in each category reveals, in broad strokes, the frequency with which individual Justices and the Court as a whole vote to protect individual rights²⁵ or exercise judicial restraint.²⁶

^{24.} The categories are as follows: (1) civil controversies in which a state or one of its officials or political subdivisions is opposed by a private party; (2) civil controversies in which the federal government, or one of its agencies or officials, is opposed by a private party; (3) state criminal cases; (4) federal criminal cases; (5) First Amendment issues of freedom of speech, press, and association; (6) equal protection claims; (7) statutory civil rights claims; (8) issues of federal court jurisdiction, party standing, justiciability, and related matters; and (9) federalism cases.

^{25.} Votes implicating individual rights are tabulated in tables reporting the outcome of state and federal criminal prosecutions (Tables 3 and 4), as well as those detailing the resolution of claims based on the First Amendment (Table 5), the Equal Protection Clause (Table 6), and civil rights statutes (Table 7). The civil cases examined in Tables 1 and 2 also involve individual rights, as these suits pit the government against persons asserting private rights. The federalism decisions tabulated in Table 9 are less obviously relevant to individual rights because such decisions focus on the balance of federal and state authority. Nevertheless, in such cases, the practical effect of voting for the state is to deny federal relief to a party alleging state encroachment upon his or her rights.

^{26.} Jurisdictional questions (Table 8), which exhibit the relative propensity of the Justices to avoid judicial decisions, are perhaps the most direct statistical evidence of judicial restraint. Other Tables included in the Study, however, also provide some indication of the individual Justices' (and the Court's) positions on the "judicial restraint/judicial activism" axis. Judicial restraint is normally identified with deference to the policy-making branches of government, adherence to precedent, avoidance of constitutional bases of decision when narrower grounds exist, respect for the Framers' intent when construing constitutional text, and avoidance of issues rendered unnecessary by the doctrines of ripeness, mootness, political questions, etc. As a result, a vote in favor of individual rights claims (Tables 3, 4, 5, 6,

From the voting patterns that emerge, the Study determines whether individual Justices and the Court are taking "conservative" or "liberal" positions. The Study classifies outcomes that favor an assertion of governmental power as conservative, and outcomes that favor a claim of individual right as liberal. Accordingly, the Study classifies as conservative a vote for the government against an individual, a vote against a claim of constitutional or statutory rights, a vote against the exercise of jurisdiction, or a vote favoring state (as opposed to federal) authority on federalism questions. The Study classifies all contrary votes as liberal.

This analytical scheme is not perfect. Unanimous decisions (a significant portion of all cases decided by the Court) are included in the Study's calculations even though liberal or conservative ideology may not have influenced the outcome of such cases. Unanimous opinions often result when either the law or the facts, or both, point so clearly in one direction that ideology is not a decisional factor. Furthermore, concern for individual rights is not always, or even necessarily, the attitudinal opposite of judicial restraint.

Despite these difficulties with our classification scheme, the basic assumption that supports this Study – that the general orientation of individual Justices and the Court to individual rights and judicial restraint is suggestive of conservative or liberal ideology – appears sound.²⁷ For example, deference to legislatures frequently results in rejection of an individual's claim, especially one predicated upon the impropriety of governmental action.²⁸ Judicial restraint is associated with a reluctance to read new rights into the Constitution or a statute.²⁹ Refusal to exercise federal jurisdiction leaves the matter to state courts with their possible bias in favor of state governmental action and is a clear rebuff to the claimant seeking federal protection of

⁷⁾ may provide some indication of "judicial activism" because judicial recognition of individual rights often requires the Court to overturn precedent or invalidate an existing statute. Federalism issues (Table 9) are also relevant because judicial restraint is traditionally identified with respect for the role of the states within the federal system.

^{27.} See supra text accompanying note 3; see also category analysis discussion infra part V.

^{28.} See, e.g., Miller v. Albright, 118 S.Ct. 1428, 1440-42 (1998) (holding that Congress' proof of paternity requirement for citizenship by birth whenever the citizen parent of a child born out of wedlock abroad is the child's father, as opposed to the mother does not represent unconstitutional denial of equal protection based on the sex of the citizen parent).

^{29.} See id.

rights.³⁰ Therefore, to the extent the Study's basic ideological assumptions regarding liberal and conservative outcomes are accurate, it is possible to identify trends by tracking the voting patterns reflected in Data Tables 1 through 10.

To reckon current ideological positions within the Court, votes of the individual Justices can be compared with those cast by other Justices this Term, as well as with the outcomes for the 1986 through 1996 Terms. Likewise, the current ideological position of the Court as a whole can be determined by comparing present outcomes for the Court majority with those of prior Terms. In Data Tables 1-10, this information appears in the form of voting percentages for each Justice and for the Court majority. Charts 1-10, in turn, graphically depict the Court's voting trends revealed in the tables.

Mean Tables 1-10 and Regression Tables 1-10 analyze the voting patterns of the individual Justices. The purpose of these tables is to determine whether a Justice's 1997 Term voting record departs in a statistically significant manner from his or her prior voting pattern and whether any significant correlation exists among the Term-to-Term voting patterns of the Justices.³¹

Finally, Frontier Analysis Tables 1-4 and Frontier Charts 1-4 compare the Justice's conservative and liberal predilections this Term and over the course of the entire Study. Frontier analysis³² mitigates some of the analytical difficulties previously discussed by measuring the strength of each Justice's tendencies relative to the rest of the Court with respect to the cases actually presented in a given Term rather than against any absolute scale.

All of these data and statistics must be interpreted with caution. The percentages and statistical results revealed on each table are affected not only by the dispositions of the individual Justices but also by the nature of the cases decided each Term. Furthermore, Supreme Court cases are not the result of random selection, and the universe of votes cast by the Justices is relatively small. Since both random sampling and large sample size are crucial elements of any fully reliable statistical analysis, conclusions drawn from this Study are not beyond

^{30.} See, e.g., Rivet v. Regions Bank of Louisiana, 118 S. Ct. 921, 926 (1998) (holding that claim preclusion by reason of a prior federal judgment is a defensive plea that provides no ground for removal of state law claims based on federal question jurisdiction).

^{31.} See infra Appendix B.

^{32.} See id.

dispute. There are obvious limitations to any empirical analysis of a subjective decision making process.³³

In light of these caveats, one might ask whether this Study is worth either conducting or reading. We believe it is. For years, experienced Supreme Court practitioners have attempted to divine the ideological predilections of individual Justices in framing their arguments to the Court. Moreover, both the media and academicians are fond of attaching ideological labels to the Court and its personnel. Supreme Court practitioners, legal scholars and the public have long assumed that assessments of Court ideology are valuable—even though such assessments may be based upon little more than the gut reactions of the attorneys, scholars, and news reporters involved. This Study, based upon a systematic methodology for objectively gathering, quantifying and analyzing data over time, should be more reliable than such ad hoc assessments.

III. Overview of the Ideological Trends of the 1997 Term

The voting behavior of the 1997 Term indicates overall liberal movement in most categories with the exception of the Criminal Party versus State Government category, which showed true conservative movement. This movement, together with the continued uneasy balance of power in swing-vote cases,³⁴ may signify a retreat from last Term's somewhat conservative posture.³⁵ The summarized results of each category are as follows:

Data Table 1, Civil Party versus State Government - Data Table 1 and Chart 1, which gauge the Justices' voting patterns in civil cases pitting state governments against private parties, show substantial liberal movement. Every Justice voted less often for the state this Term than last, and the Court's decisions as a whole favored private litigants 26% more often. Chief Justice Rehnquist continued to vote

^{33.} The general reliability of statistical inference depends on random sampling. See generally Allen T. Craig and Robert V. Hogg, Introduction to Mathematical Statistics 157-58 (1995); Raymond H. Myers, Classical and Modern Regression with Applications 9-11 (1990). The Court's method of selecting cases is far from random. Rather, it is the result of a conscious decisional process. Reliable statistics generally require large quantities of information to produce reliable results. As sample sizes become larger, inferences become more accurate. This Study is subject to sampling bias, both because the sample is not random and because it is comparatively small. The statistical inferences below, therefore, may not accurately represent a Justice's (or the Court's) views.

^{34.} See infra Data Table 10.

^{35.} See generally, 1996 Study, supra note 1.

most conservatively of all the Justices in this category, while Justice Stevens retained his customary position at the liberal end of the Table.

Data Table 2, Civil Party versus Federal Government - Likewise, Data Table 2 and Chart 2 indicate liberal movement. Seven of the nine Justices voted less often for the Federal Government this Term than during the 1996 Term. Justices O'Connor and Scalia were the only Justices not participating in this liberal shift. Traditionally conservative Chief Justice Rehnquist and Justice Thomas each voted less often for the government this Terms than in any Term previously included in this study.

Data Table 3, Criminal Party versus State Government - This category is the only category indicating any conservative movement this Term. Every Justice except Justice Ginsburg voted more often for the state government litigant than in 1996. Although the split decisions category reflects a drop of over 30 percentage points, in favor of the criminal defendant, the Court majority voted in favor of the state 80% of the time in unanimously decided cases, and 71.4% of the time overall. By contrast, the predictable Justice Stevens was nearly 20 percentage points below the next Justice, voting for the state government only 23.1% of the time.

Data Table 4, Criminal Party versus Federal Government - This category has historically exhibited a conservative voting pattern in favor of the government. This pattern remains unchanged this Term, although a slight liberal trend can be detected. In split cases, the majority voted for the government 66.7% of the time, down nearly ten percentage points from last Term. Overall, the majority voted for the government 80.0% of the time, also down from 1996. However, in unanimous cases, the Court repeated last Term's result and voted for the government 100% of the time.

Data Table 5, First Amendment; Data Table 6, Equal Protection - Both of these categories included very few cases this Term. Only one First Amendment claim and two Equal Protection claims were addressed. Accordingly, statistical conclusions are difficult to synthesize. There are, however, some outcomes worth noting. This Term the Court continued its conservative trend of disfavoring First Amendment claims. Last Term, the Court voted for such claims a mere 28.6% of the time, and this Term the single decision addressing the issue rejected the claim. On the other hand, Equal Protection showed some liberal movement with the Court upholding claims 50% of the time, an increase of 30 percentage points over last Term. One of the two

Equal Protection Cases, *Miller v. Albright*, produced an intriguing voting result based on conflicting standards of scrutiny.³⁶

Data Table 7, Statutory Civil Rights - Data Table 7 and Chart 7 indicate slight liberal movement in this category with decisions upholding claims 61.5% of the time. This figure represents a 4.4% increase over last Term and marks the second highest score ever for this category. The liberal movement is also indicated by a marked turnaround in split-decision cases which were decided favorably for claims 62.5% of the time (up 45.8% from last Term). Justice Kennedy, the Court's most frequent swing voter, mirrored this result, voting 61.5% in favor of civil rights claims. Interestingly, and notwithstanding the liberal trend exhibited by the Court's final decisions in this category, eight of the nine Justices actually voted less often for statutory civil rights claims this Term than last.

Data Table 8, Jurisdiction - This category reveals minor liberal movement with the majority voting to assert jurisdiction in 58.6% of cases in which the issue was addressed. This figure was up 6.4% compared with last Term. Justice Souter voted more often than any other Justice to assert jurisdiction, replacing Justice Stevens who has held the Table's top position since 1994.

Data Table 9, Federalism - This category indicates a significant liberal shift this Term. In fact, every Justice voted less often for the state this Term than in the 1996 Term, and the percentage of cases decided in favor of a state litigant dropped to 31.6%—the second lowest score ever recorded for the category. Chief Justice Rehnquist and Justice Scalia, who usually vote 70% or more for the states, voted a mere 36.8% and 31.6% respectively. Justice Kennedy occupied the top spot, voting for the states 42.1% of the time. At the other end of the scale, Justices Souter and Breyer voted for the states in a mere 15.8% of cases. All Justices' except Justice Ginsburg, showed statistically significant changes to their voting patterns in this category.

Data Table 10, Split Decisions - This Term marked only the third time in the history of this Study that the "Liberal Coalition" prevailed more often in split-decision cases than the "Conservative Coalition." However, the differential between the two "Coalitions" is the narrowest in the study at a mere 12.5 percentage points. Justice Kennedy was predictably the most frequent swing voter, voting with the Majority 87.5% of the time. This was within 0.2% of the prediction for 1997. Although neither "Coalition" dominated the swing votes, this Term's

^{36.} See infra text accompanying notes 62-65.

overall liberal movement suggests that the Rehnquist court may be voting less conservatively.

IV. The 1997 Term Voting Record

This study seeks to quantify several characteristics of Supreme Court voting behavior by analyzing the Court's voting record. We examine voting trends, patters, and mean voting percentages both for individual Justices and for the Court as a whole.³⁷ Subpart A below explains, in simple fashion, the numerical and statistical tests used in this Study and their representation in the charts and graphs that follow.³⁸ Subpart B provides a categorical analysis of significant trends and patters present in the data.

A. The Data

Data Tables 1 through 10 set out the Term-by-Term voting scores for each Justice, the breakdown of votes contributing to 1997 Term scores, our predicted 1998 Term scores, the prediction error, and our predicted scores for the 1997 Term. Scores are simply the percentage of time a Justice voted in favor of the party or claim indicated in each table's title. Predictions are based on an ARIMA³⁹ forecasting model. The bottom three rows of each Data Table contain scores for the Court as a whole and are broken down into three categories. "Majority all Cases" summarizes the Court's disposition of all decisions involving the indicated party or claim, while "Split Decision" and "Unanimous" summarize only those decisions reached by a divided or unanimous Court respectively.

Charts 1 through 10 display, in graphical form, the Court's voting record in each category over the course of the Study. The "Majority All Cases" line reveals trends in the Court's disposition of cases within the indicated category from one Term to the next. The "Split Decisions" line is perhaps more interesting because it includes only those cases in which Justices disagreed with one another and so may provide a better indication of the Court's "balance" in each category. The "Unanimous" line rounds out the information presented by demon-

^{37.} Our ability to analyze newer Justices' voting patterns may be restricted or precluded in some instances due to insufficient data.

^{38.} For additional information regarding our methods of analysis, see infra Appendix B.

^{39.} ARIMA stands for AutoRegressive, Integrated Moving-Average. For more information on this procedure, see infra Appendix B.

strating the outcome of cases in which there was no ideological division.

Mean Tables 1 through 10 set out the mean of all scores recorded for each Justice during the last ten Terms of this Study (1987-1996). Also shown are the 99% confidence interval for the true mean, the standard deviation of the scores, and the 1997 Term scores. The final column indicates whether 1997 Term scores differ in a statistically significant way from the Justice's past mean scores.

Finally, Regression Tables 1 through 10 show Pearson correlations and adjusted r² statistics relating the Justices' Term-to Term voting patterns. The r² statistic is a more reliable indicator of correlation than the Pearson statistic. A high positive correlation between Justices does not indicate that they vote together, but rather that their Term-to-Term scores tend to move in similar directions. In fact, this statistic may provide more information regarding the nature of the cases decided each Term than it does regarding the Court's voting behavior. Although some general indications of bloc voting behavior might be deduced from this information, more reliable information can be gleaned from our swing vote analysis⁴⁰ and frontier analysis.⁴¹ For this reason, we devote only minimal discussion to the correlation statistic this Term, but continue to include the data in order to maintain consistency with information provided by the Study in prior Terms.

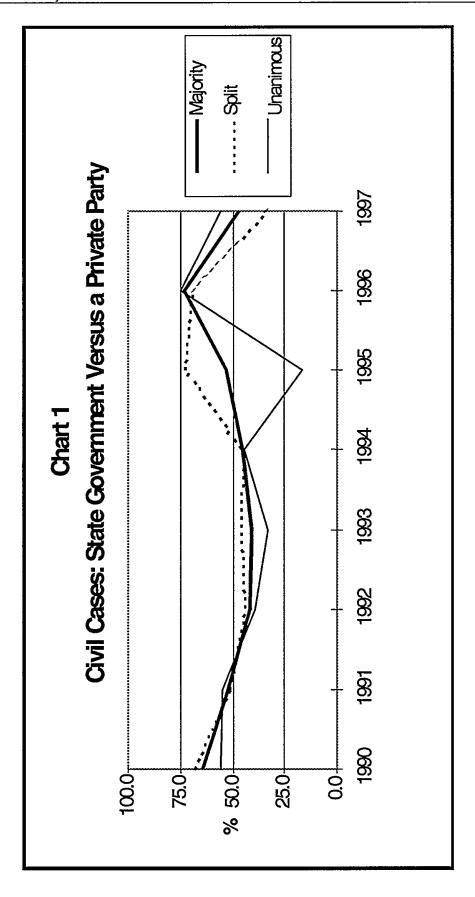
^{40.} See infra Data Table 10.

^{41.} See infra Part VI and Appendix B.

							Date	Data Table 1	_						
					Civil Ca	ses: Sta	te Gove	Civil Cases: State Government Versus a Private Party	Versus	a Privat	e Party				
Justice				% Votes for Government	for Gove	ernment				X2	1997 Term	Term	۵	Predictions	SI
-											×	Votes			
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	For	Against	Prediction	Error	Prediction
	Term	Term	Term	Term	Term	Term	Term	Term	Term	Term	Gov't	Gov't	1997		1998
Rehnquist	2.99	70.3	84.0	71.4	52.8	68.2	0.09	43.8	84.9	0.09	6	9	42.9	17.1	63.0
Scalia	59.2	64.9	64.0	64.3	41.7	50.0	0.09	52.9	77.4	0.09	6	9	57.2	2.8	61.5
Thomas ¹	<u>2</u>	27.0		71.4	41.7	45.5	55.0	67.4	77.4	0.09	6	9	77.7	-17.7	81.3
Kennedy	57.1	61.1	76.0	42.9	41.7	40.9	40.0	41.2	71.9	53.3	æ	7	38.6	14.7	51.6
O'Connor	57.4	67.6		50.0	50.0	40.9		47.1	68.8	53.3	œ	7	74.5	-21.2	51.2
Breyer ²	30,6	43.2	24.0	35,7	30.3	42.9	42.1	29.4	54.6	46.7	7	ω	0	0	0
Ginsburg ³	55,1	59.5	64.0	59.5	51.4	40.9	50.0	35.3	53.1	46.7	7	8	0	0	53
Souter ⁴	20,4	27.0	63.6	52.5	36.4	45.5	35.0	29.4	54.6	46.7	7	80	31.1	15.6	40.4
Stevens	35.4	40.5	36.0	29.3	31.3	27.3	42.1	23.5	48.5	37.5	9	9	19.9	17.6	43.6
Majority	51.0	51.4	64.0	52.4	41.7	40.9	45.0	52.9	72.7	46.7	7	8	81.6	-34.9	53.2
Split	64.0	52.4	68.8	51.6	44.4	46.2	45.5	72.7	69.2	33.3	Ø	4			
Unanimous	50.0	50.0	55.6	54.6	38.9	33.3	44.4	16.7	75.0	55.6	S	4			
	-		-	-			!								

) = no data available or could not calculate with available data

¹ Justice Thomas replaced Justice Marshall in 1991 ² Justice Breyer replaced Justice Blackmun in 1994 ³ Justice Ginsburg replaced Justice White in 1993 ⁴ Justice Souter replaced Justice Brennan in 1990



ŀ			Mean Table 1		
		Civil Cases: S	Civil Cases: State Government Versus a Private Party	sus a Private Party	
Justice Mea	Mean Voting Percentage	99% Confidence	Standard	Actual Voting Percentage	Did This Term Show a Statistically
	All Prior Terms (μ)	Interval for True Mean	Deviation of μ (s)	This Term (X2)	Significant Change in Voting Behavior?
Kennedy	52.3	+/- 11.1	13.57	53.33	OU
O'Connor	54.9	+/- 8.4	10.80	53.33	02
Rehnquist	67.4	+/- 9.4	12.04	00:09	52
Scalla	59.1	+/- 7.5	9.62	90.00	OU
Stevens	36.2	+/- 6.1	7.88	37.50	OU
Breyer	42.0	+/- 18.7	12.58	46.67	no
Ginsburg	44.8	+/- 10.6	8.20	46.67	ОП
Thomas	59.7	+/- 15.3	14.56	00.09	OU
Souter	45.3	+/- 12.0	12.32	46.67	υO

() = no data available or could not calculate with available data

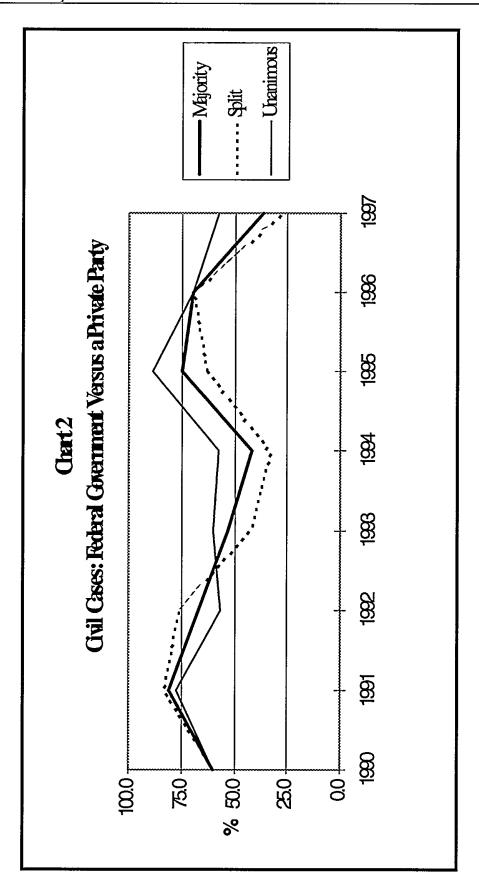
			Regr	Regression Table 1	-			
		Civil	Cases: State	Civil Cases: State Government Versus a Private	/ersus a Privat	ē		
			ဝ	Correlation (p) / R ²	R²			
Justice	Kennedy	O'Connor	Rehnquist	Scalia	Stevens	Breyer	Ginsburg	Thomas
O'Connor	98'0/86'0							
Rehnquist	0.77/0.55							
Scalia			0.71/0.46				`	
Stevens								
Breyer	0.84/0.56	0.71/0.26	0.95/0.84	0.90/0.71	0.93/0.81			
Ginsburg			0.76/0.43	0.82/0.57	96.0/66.0	0.92/0.78		
Thomas				0.85/0.68				
Souter	0.80/0.58	0.75/0.48	0.93/0.84			0.95/0.85		and matter second on the contract of

() = no data available or could not calculate with available data

							Date	Data Table 2	2						
					Divil Cas	es: Fed	eral Gov	Civil Cases: Federal Government Versus a Private Party	t Versus	s a Priva	te Party		į		
Justice			Ī	% Votes	for Gov	Votes for Government				X2	1997 Term	Term	۵.	Predictions	દ્ય
								į			×	Votes			
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	For	Against	Prediction	Error	Prediction
	Term	Term	Term	Term	Term	Term	Term	Term	Term	Term	Gov't	Gov't	1997		1998
O'Connor	60.7	60.7	0.09	52.4	62.5	56.3	27.8	62.5	59.1	61.9	13	8	45.1	16.8	51.7
Breyer ¹	60.7	64.3	60.0	57.1	48.5	68.8	47.4	60.0	73.9	57.1	57	O	0	0	0
Stevens	42.9	57.1	40.0	57.1	34.4	70.6	68.4	63.2	65.2	55.0	F	ത	66.7	-11.7	66.4
Scalia	59.3	60.7	57.9	71.4	67.7	52.9	42.1	0.09	45.5	52.4	11	10	48.3	4.1	42.2
Souter ²	37.0	53,6	55.6	71.4	70.0	76.5	42.1	75.0	9.69	47.6	10	=	9.89	-21.0	63.3
Kennedy	66.7	60.7	55.6	76.2	70.0	52.9	47.4	80.0	63.6	45.5	0	12	9.99	-21.2	58.2
Ginsburg ³	71,4	75.0		81.0	69.7	58.8	52.6	85.0	65.2	40.9	တ	13	0	0	49.8
Rehnquist	71.4		70.0	71.4	74.2	58.8	52.6	75.0	69.6	38.1	80	13	62.5	-24.4	62.9
Thomas ⁴	39.3	50.0	55.0	53.3	64.5	47.1	42.1	65.0	40.9	33.3	7	14	56.9	-23.6	29.8
Majority	64.3	71.4	0'09	81.0	66.7	52.9	42.1	75.0	9.69	36.4	ω	14	63.8	-27.4	63.1
Split	66.7	66.7	60.0	83.3	76.5	42.8	33.3	63.6	69.2	26.7	4	11			
Unanimous	61.5	76.9	0.09	77.8	56.3	60.0	57.1	88.9	70.0	57.1	4	က			
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() = no data available or could not calculate with available data Justice Breyer replaced Justice Blackmun in 1994

² Justice Souter replaced Justice Brennan in 1990 Justice Ginsburg replaced Justice White in 1993 Justice Thomas replaced Justice Marshall in 1991



			Mean Table 2		
		Civil Cases: Fe	Civil Cases: Federal Government Versus a Private Party	rsus a Private Party	
Justice	Mean Voting Percentage	99% Confidence	Standard	Actual Voting Percentage	Did This Term Show a Statistically
	All Prior Terms (μ)	Interval for True Mean	Deviation of μ (s)	This Term (X2)	Significant Change in Voting Behavior?
Kennedy	63.1	+/- 8.4	10.29	45.45	yes
O'Connor	59.4	6.6 -/+	12.72	61.90	ou
Rehnquist	70.4	4/- 7.9	10.19	38.09	yes
Scalia	60.3	+/- 8.9	11.41	52.38	yes
Stevens	55.0	+/- 9.3	11.94	55.00	no
Breyer	60.4	+/- 19.7	13.28	57.14	ou
Ginsburg	65.4	+/- 18.1	14.03	40.91	yes
Thomas	52.2	+/- 11.2	10.70	33.33	yes
Souter	65.7	+/- 12.1	12.43	47.62	yes

() = no data available or could not calculate with available data

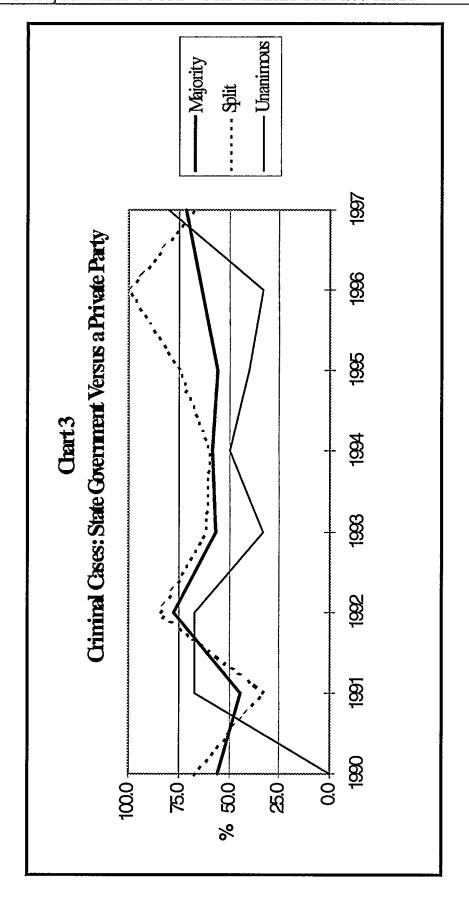
or O'Connor Rehnquist Scalia Stevens Breyer or list 0.78/0.56 0.95/0.86 0.82/0.61 0.70/0.39 0.74/0.32	:		Oivil C	Re Cases: Federal G	Regression Table 2 Civil Cases: Federal Government Versus a Private Party Correlation (p) / R ²	2 ius a Private Par R²	ty.		
or ist 0.78/0.56 g 0.97/0.92 g 0.83/0.63 0.74/0.47 0.74/0.32 0 0.74/0.32	Justice	Kennedy	O'Connor	Rehnquist	Scalia	Stevens	Breyer	Ginsburg	Thomas
ist 0.78/0.56 0.95/0.86 0.95/0.86 0.70/0.39 0.74/0.32 0	O'Connor								
g 0.97/0.92 0.95/0.86 0.83/0.63 0.70/0.39 0.74/0.32 0	Rehnquist	0.78/0.56						``\ ``\\\\	
g 0.97/0.92 0.95/0.86 0.70/0.39 0.74/0.32 0	Scalia								
g 0.97/0.92 0.95/0.86 0.70/0.39 0.74/0.32 0	Stevens								
g 0.97/0.92 0.95/0.86 0.83/0.63 0.82/0.61 0.70/0.39 0.74/0.32 0	Breyer								
3 0.83/0.63 0.82/0.61 0.70/0.39 0 0.74/0.47 0.74/0.32 0	Ginsburg	0.97/0.92		0.95/0.86				, , , , , , , , , , , , , , , , , , , ,	
0.74/0.32	Thomas	0.83/0.63		0.82/0.61	0.70/0.39			0.93/0.81	
	Souter	0.74/0.47					0.74/0.32	0.73/0.37	

() = no data available or could not calculate with available data

							Data	Data Table 3	3						
		:		O	riminal (Jases: 5	state Go	vernme	Criminal Cases: State Government Versus a Private Party	s a Priv	ate Part	^			
Justice				% Votes	tes for Government	ernment				X2	1997 Term	Term	Ē	Predictions	SI
											×	Votes			
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	For	Against	Prediction	Error	Prediction
	Term	Term	Term	Term	Term	Term	Term	Term	Term	Term	Gov"t	Gov't	1997		1998
Thomas ¹	14.8	8.8	0.0	75.0	85.7	87.5	91.7	2'99	63.6	92.3	12	+	65.9	29.4	63.5
Scalia	77.8	73.5	74.1	77.8	86.4	81.3	83.3	55.6	63.6	84.6	Ŧ	2	71.4	13.2	72.4
Kennedy	81.5	73.5	57.7	50.0	77.3	50.0	75.0	55.6	54.6	76.9	9	က	49.5	27.4	57.0
Rehnquist	85.2	85.3	81.5	66.7	90.0	81.3	91.7	66.7	63.6	76.9	9	က	72.8	4.1	70.6
O'Connor	77.8	76.5	66.7	33.3	66.7	68.8	58.3	44.4	63.6	71.4	9	4	45	26.4	66.3
Souter ²	18.5	11.8	68.0	55.6	55.0	25.0	41.7	22.2	54.6	57.1	80	9	28.2	28.9	72.3
Breyer ³	37.0	35.3	14.8	33.3	25.0	12.5	41.7	22.2	36.4	50.0	7	7	0	0	0
Ginsburg ⁴	77.8	73.5	48.1	55.6	75.0	43.8	41.7	33.3	45.5	42.9	9	8	0	0	43.3
Stevens	37.0	20.6	0.0	27.8	31.8	25.0	8.3	22.2	18.2	23.1	3	10	22.4	0.7	22.8
Majority	70.4	64.7	55.6	44.4	77.3	56.3	58.3	55.6	63.6	71.4	10	4	56.2	15.2	67.6
Split	72.7	70.0	68.2	33.3	84.6	61.5	0.09	75.0	100.0	66.7	9	က			
Unanimous	60.0	25.0	0.0	9.99	66.7	33.3	50.0	40.0	33.3	80.0	4	1			

() = no data available or could not calculate with available data Justice Thomas replaced Justice Marshall in 1991

Justice Souter replaced Justice Brennan in 1990 Justice Breyer replaced Justice Blackmun in 1994 Justice Ginsburg replaced Justice White in 1993



			Mean Table 3		
		Criminal Cases	Criminal Cases: State Government Versus a Private Party	ersus a Private Party	
Justice	Mean Voting Percentage	99% Confidence	Standard	Actual Voting Percentage	Did This Term Show a Statistically
	All Prior Terms (μ)	Interval for True Mean	Deviation of μ (s)	This Term (X2)	Significant Change in Voting Behavior?
Kennedy	64.5	6'6-/+	12.11	76,92	yes
O'Connor	63.0	+/- 10.6	13.70	71.43	ou
Rehnquist	79.4	+/- 7.8	10.08	76.92	00
Scalia	73.0	+/- 9.6	12.35	84.62	yes
Stevens	21.2	+/- 7.9	10.22	23.08	υo
Breyer	33.4	+/- 15.0	10.06	20.00	on
Ginsburg	41.0	6'9 -/+	5.39	42.86	ou
Thomas	78.4	+/- 12.2	11.65	92.31	yes
Souter	46.0	+/- 16.7	17.11	57.14	no
		, , , , , , , , , , , , , , , , , , , ,			

() = no data available or could not calculate with available data

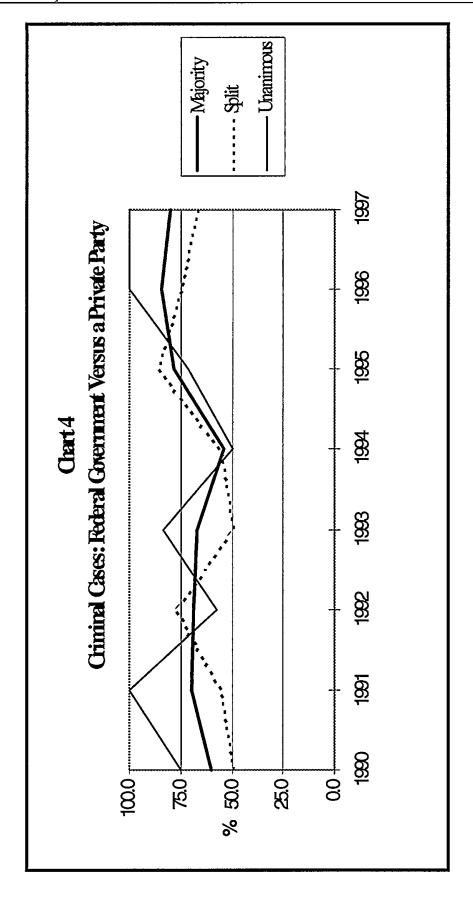
			Reg	Regression Table 3	93			
		Crimir	minal Cases: State Government Versus a Private	le Government	l Versus a Priv	ate		
			သ	Correlation (p) / R ²	H ²			
Justice	Kennedy	O'Connor	Rehnquist	Scalia	Stevens	Breyer	Ginsburg	Thomas
O'Connor								
Rehnquist								
Scalia								
Stevens						`		
Breyer	0.82/0.50	0.93/0.80		0.92/0.77		3		
Ginsburg		0.88/0.69				0.75/0.35		
Thomas			0.84/0.64	0.90/0.77		0.78/0.41		
Souter						0.85/0.59		

() = no data available or could not calculate with available data

							Data	Data Table 4	4						
				Ċ	Criminal Cases: Federal Government Versus a Private Party	ases: Fe	deral G	overnme	ent Vers	us a Pri	vate Pa	rty			
Justice				% Votes for Government	for Gove	ernment				X2	1997 Term	Term	d.	Predictions	St
										. •	>	Votes			
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	For	Against	Prediction	Error	Prediction
	Term	Term	Term	Term	Term	Term	Term	Term	Term	Term	Gov't	Gov't	1997		1998
Kennedy	88.9	66.7	50.0	84.6	60.0	66.7	61.5	71.4	84.6	90.0	6	1	77.3	12.7	80.4
Thomas ¹	33.3	*** ***	50,0	54.6	81.3	88.3	61.5	71.4	84.6	90.0	တ	_	78.2	11.8	93.7
O'Connor	77.8			76.9	75.0	75.0	69.2	71.4	92.3	80.0	ω	2	75.1	4.9	78.2
Rehnquist	88.9	77.8		76.9	81.3	83.3	69.2	71.4	84.6	70.0	7	က	71.9	٠ . 1.9	73.9
Scalia	66.7	66.7		76.9	62.5	66.7	53.9	78.6	92.3	70.0	7	က	76.3	-6.3	78.3
Breyer ²	55.6			61,5	46.7	58.3	69.2	71.4	69.2	70.0	7	က	0	0	0
Souter ³	25.0	11.1	75.0	69.2	43.8	58.3	61.5	78.6	84.6	70.0	7	က	87.5	-17.5	73.9
Ginsburg ⁴	88.9	77.8		69.2	56.3	58.3	61.5	71.4	76.9	60.0	9	4	0	0	85.1
Stevens	66.7	33.3	60.0	38.5	26.7	50.0	30.8	50.0	53.9	55.6	5	4	38.3	17.3	45.5
Majority	88.9	66.7	0.09	69.2	68.8	66.7	53.9	78.6	84.6	80.0	8	2	84.8	-4.8	77
Split	100.0	83.3	50.0	55.6	77.8	50.0	55.6	85.7	75.0	66.7	4	C)			
Unanimous	66.7	33.3	75.0	100.0	57.1	83.3	50.0	71.4	100.0	100.0	4	0			

) = no data available or could not calculate with available data

¹ Justice Thomas replaced Justice Marshall in 1991 ² Justice Breyer replaced Justice Blackmun in 1994 ³ Justice Souter replaced Justice Brennan in 1990 ⁴ Justice Ginsburg replaced Justice White in 1993



			Mean Table 4		
		Criminal Cases:	Federal Government	Criminal Cases: Federal Government Versus a Private Party	
Justice	Mean Voting Percentage	99% Confidence	Standard	Actual Voting Percentage	Did This Term Show a Statistically
	All Prior Terms (μ)	Interval for True Mean	Deviation of μ (s)	This Term (X2)	Significant Change in Voting Behavior?
Kennedy	70.6	+/- 10.1	12.38	00'06	yes
O'Connor	77.0	+/- 5.9	7.65	80.00	OU OU
Rehnquist	79.0	+/- 5.1	6.63	70.00	yes
Scalia	67.1	+/- 10.5	13.46	70.00	OU
Stevens	46.7	+/- 10.7	13.80	55.55	OU
Breyer	70.0	+/- 1.9	1.25	70.00	ОП
Ginsburg	67.0	+/- 11.1	8.62	60.00	OU
Thomas	73.6	+/- 14.2	13.50	00.06	yes
Souter	67.3	+/- 13.5	13.88	70.00	no

() = no data available or could not calculate with available data

		Crimina	Regression Table 4 Criminal Cases: Federal Government Versus a Private	Regression Table 4	le 4 It Versus a Pri	vate		
			S	Correlation (p) / R ²	R ²			
Justice	Kennedy	O'Connor	Rehnquist	Scalia	Stevens	Breyer	Ginsburg	Thomas
O'Connor				, ,			,	
Rehnquist							``	
Scalia	0.72/0.47							
Stevens								
Breyer						a vana an ana an		•
Ginsburg				0.85/0.62				
Thomas								
Souter					0.73/0.46		0.93/0.82	

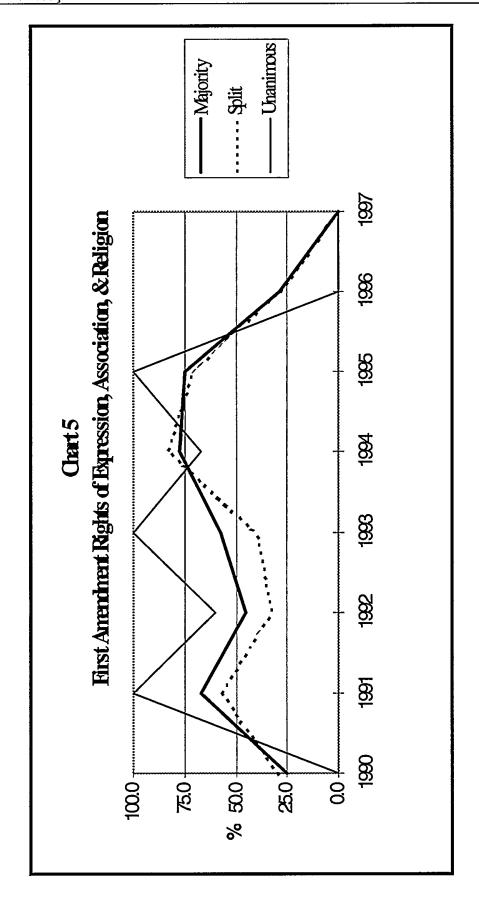
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							Data	Data Table 5	5						
				First /	First Amendment Rights of Expression, Association, and Religion	ent Rig	hts of Ex	pressio	n, Asso	ciation,	and Reli	gion			
Justice			6	6 Votes	% Votes for Rights Claim	ts Claim				X2	1997 Term	Term	Ь	Predictions	SI
											^	Votes			
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	For	Against	Prediction	Error	Prediction
	Term	Term	Term	Term	Term	Term	Term	Term	Term	Term	Claim	Claim	1997		1998
Souter1	76.5	73,3	61.5	20.0	40.0	85.7	66.7	37.5	57.1	100.0	_	0	20.3	29.7	100.0
Kennedy	37.5	40.0	41.7	77.8	77.8	71.4	88.9	87.5	57.1	0.0	0	-	89.0	-89.0	0.0
O'Connor	25.0	26.7	54.5	77.8	36.4	57.1	66.7	62.5	28.6	0.0	0	-	59.2	-59.2	13.7
Rehnquist	18.8	13.3	16.7	50.0	36.4	42.9	55.6	62.5	28.6	0.0	0	-	66.2	-66.2	0.0
Scalia	35.3	26.7	25.0	37.5	45.5	85.7	55.6	37.5	85.7	0.0	0	-	65.8	-65.8	81.6
Stevens	64.7	46.7	50.0	100.0	90.0	57.1	66.7	62.5	42.9	0.0	0	-	56.8	-56.8	13.1
Breyer ²	41,2	60.0	69.2	88.9	90.0	7.1.4	66.7	75.0	14.3	0.0	0	-	0	0	0
Ginsburg ³	23.5	20.0	15.4	50.0	36.4	71.4	66.7	75.0	57.1	0.0	0	-	0	0	0.0
Thomas⁴	33.3	73.3	61.5	20.0	40.0	85.7	66.7	37.5	85.7	0.0	0	-	77.1	-77.1	0
Majority	35.3	40.0	25.0	66.7	45.5	57.1	77.8	75.0	28.6	0.0	0	-	71.1	-71.1	6.6
Split	22.2	40.0	30.0	57.1	33.3	40.0	83.3	71.4	28.6	0.0	0	-			
Unanimous	50.0	40.0	0.0	100.0	60.0	100.0	66.7	100.0	0.0	0.0	o	0			
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Justice Souter replaced Justice Brennan in 1990

² Justice Breyer replaced Justice Blackmun in 1994
³ Justice Ginsburg replaced Justice White in 1993
⁴ Justice Thomas replaced Justice Marshall in 1991



			Mean Table 5		
		First Amendment F	Rights of Expression, A	First Amendment Rights of Expression, Association and Religion	
Justice	Mean Voting Percentage	99% Confidence	Standard	Actual Voting Percentage	Did This Term Show a Statistically
	All Prior Terms (μ)	Interval for True Mean	Deviation of μ (s)	This Term (X ₂)	Significant Change in Voting Behavior?
Kennedy	64.6	+/- 15.9	19.53	00'0	yes
O'Connor	45.8	+/- 14.8	19.08	0.00	yes
Rehnquist	32.6	+/- 13.9	17.84	0.00	yes
Scalia	46.3	+/- 16.4	21.13	0.00	уөз
Stevens	61.9	+/- 14.1	18.20	0.00	yes
Breyer	52.0	+/- 48.9	32.91	00'0	no
Ginsburg	9'29	+/- 10.0	7.74	00'00	yes
Thomas	55.9	+/- 28.9	27.47	0.00	yes
Souter	52.6	+/- 21.2	21.77	100.00	yes
· ·					

() = no data available or could not calculate with available data

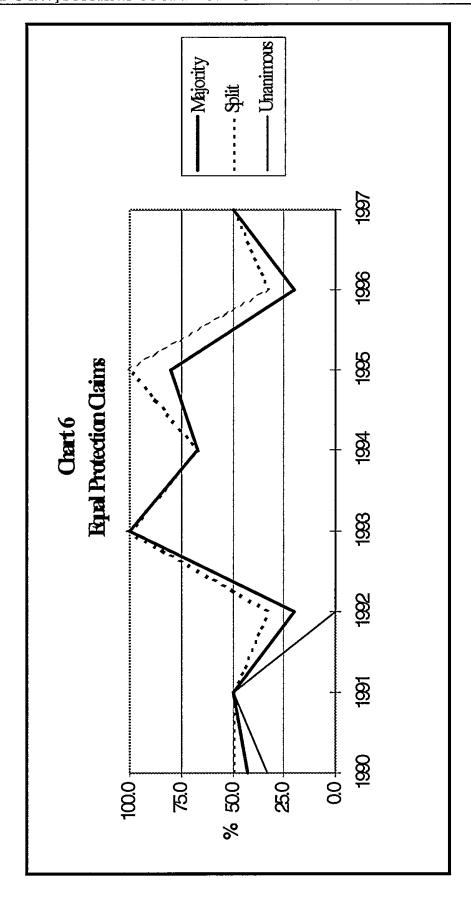
			Æ	Regression Table 5				
		First Amendh	First Amendment Freedom of Expression, Association, and Religion	Spression, Asso	dation, and Relig	<u>ia</u>		
			8	Correlation(p)/PP	21-			
Justice	Kennedy	CCarror	Pernquist	Scalia	Stevens	Breyer	Gindania	Thomas
O'Cornor	0.77/0.55			`				
Remouist	0.90/0.78	0.82/0.64	***************************************				`	
Scalia								
Stevers	0.77/0.54	0.70/0.45						
Breyer	0.90/0.72	0:36/0:30	0.98/0.90	•	0.89/0.68			
Ginsburg	0.97/0.92	0.92/0.80	0.93/0.81	0.73/0.37	0.97/0.93	0.82/0.52	* ** ** *** ***** * ** ** ** ** ** ****	
Thomas				0.97/0.92			0.75/0.41	:
Souter					-0.83/0.64	-0.72/0.28		

() = no data available or could not calculate with available data

							Date	Data Table 6	9						
						Ш	qual Pro	Equal Protection Claims	Claims						
Justice			0	% Votes	tes for Rights Claim	ts Claim				X2	1997 Term	Term	Ω.	Predictions	SI
											Š	Votes			
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	For	Against	Prediction	Error	Prediction
	Term	Term	Term	Term	Term	Term	Term	Term	Term	Term	Claim	Claim	1997		1998
Breyer ¹	60.0	0.0	88.3	50.0	40.0	100.0	33.3	40.0	20.0	100.0	2	0	0	0	0
Ginsburg ²	66.7	0.0	42,9	50.0	0.0	100.0	33.3	40.0	20.0	100.0	N	0	0	0	52.4
Souter ³	50.0	0.0	50.0	50.0	40.0	100.0	33.3	40.0	20.0	100.0	N	0	22.1	77.9	34.4
Kennedy	57.1	25.0	42.9	50.0	20.0	100.0	2.99	80.0	33.3	50.0	7	_	78.8	-28.8	65.2
O'Connor	66.7	25.0		33.3	40.0	100.0	66.7	80.0	50.0	50.0	-	-	84.3	-34.3	69.5
Rehnquist	57.1	20.0	14.3	50.0	20.0	0.0	66.7	0.09	0.0	50.0	_	-	57.4	-7.4	32.0
Stevens	66.7	0.0		2.99	40.0	100.0	33.3	40.0	40.0	50.0	_	-	29	-9.0	50.7
Scalia	57.1	25.0			20.0	0.0	2.99	40.0	25.0	0.0	0		41	-41.0	15.5
Thomas ⁴	50.0	0.0		60.0	20.0	0.0	66.7	50.0	25.0	0.0	0	-	44.4	-44.4	2.6
Majority	57.1	0.0	42.9	50.0	20.0	100.0	2.99	80.0	20.0	50.0	٦	1	73.8	-23.8	62.5
Split	100.0	0.0	50.0	50.0	33.3	100.0	66.7	100.0	33.3	50.0	_	-			
Unanimous	50.0	0.0	33.3	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0			

) = no data available or could not calculate with available data ¹ Justice Breyer replaced Justice Blackmun in 1994

² Justice Ginsburg replaced Justice White in 1993
³ Justice Souter replaced Justice Brennan in 1990
⁴ Justice Thomas replaced Justice Marshall in 1991



		:	Mean Table 6		
			Equal Protection Claims	ms	
Justice	Mean Voting Percentage	99% Confidence	Standard	Actual Voting Percentage	Did This Term Show a Statistically
	All Prior Terms (μ)	Interval for True Mean	Deviation of μ (s)	This Term (X ₂)	Significant Change in Voting Behavior?
Kennedy	50.8	+/- 20.8	25.50	50.00	ОП
O'Connor	49.6	+/- 20.4	26.22	20.00	ОП
Rehnquist	28.6	+/- 19.3	24.81	20.00	yes
Scalia	28.0	+/- 15.5	19.99	0.00	yes
Stevens	48.4	+/- 21.9	28.20	50.00	20
Breyer	31.1	+/- 15.1	10.18	100.00	yes
Ginsburg	48.3	+/- 45.6	35.43	100.00	ОП
Thomas	36.9	+/- 27.3	26.00	0.00	yes
Souter	47.6	+/- 24.6	25.29	100.00	yes
		, , , , , , , , , , , , ,			

() = no data available or could not calculate with available data

Regression Table 6 Equal Protection Claims Correlation (p) / R²	Kennedy O'Connor Rehnquist Scalia Stevens Breyer Ginsburg Thomas	0.87/0.73				0.84/0.57	-0.78/0.48 0.73/0.39 1.00/1.00	0.93/0.84	-0.71/0.43 1.00/1.00 1.00/1.00
		0.87/0.73							
	Justice	O'Connor	Rehnquist	Scalia	Stevens	Breyer	Ginsburg	Thomas	Souter

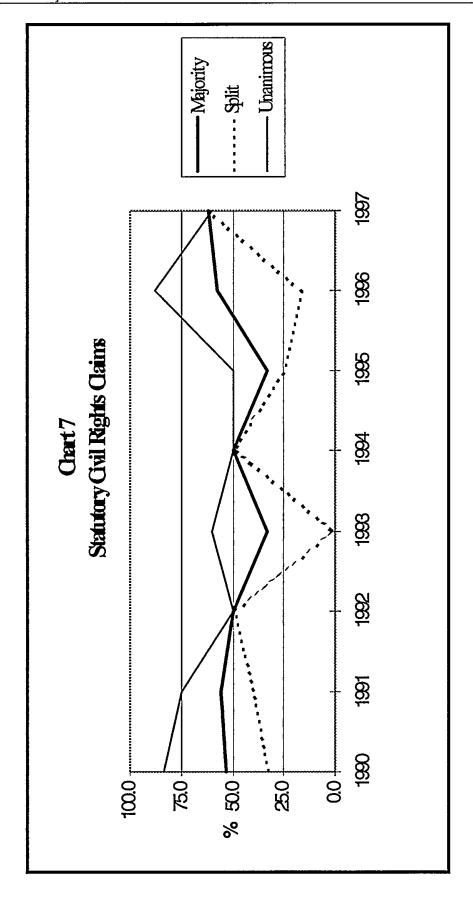
() = no data available or could not calculate with available data

							Date	Data Table 7	7						
						Stat	utory Ci	vil Right	Statutory Civil Rights Claims	"					
Justice			0	% Votes for Rights Claim	for Righ	ts Claim				X2	1997 Term	Term	Р	Predictions	SL
									~~~~		Š	Votes			
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	For	Against	Prediction	Error	Prediction
	Term	Term	Term	Term	Term	Term	Term	Term	Term	Term	Claim	Claim	1997		1998
Stevens	73.7	77.8	0.08	88.9	70.0	55.6	75.0	83.3	85.7	84.6	11	2	87.8	-3.2	82.3
Breyer ¹	80.0	88.9	80.0	88.9	63.6	77.8	75.0	83.3	85.7	84.6	=	Ø	0	0	0
Ginsburg ²	55.0	88.9	53.3	66.7	50.0	44.4	75.0	66.7	78.6	76.9	10	က	0	0	93.5
Souter ³	95.0	100.0	57.1	44.4	45.5	44.4	75.0	66.7	92.9	76.9	9	က	84.5	-7.6	97.2
Kennedy	45.0	62.5	33.3	55.6	36.4	33.3	25.0	16.7	50.0	61.5	80	ſΩ	15.6	45.9	63.4
O'Connor	52.6	55.6	53.3	55.6	54.6	33.3	50.0	33.3	64.3	41.7	5	7	41.6	0.1	68.2
Rehnquist	35.0	44.4	33.3	44.4	36.4	33.3	50.0	16.7	50.0	30.8	4	О	19.7	11.1	42.5
Scalia	40.0	55.6	46.7	44.4	45.5	33.3	25.0	16.7	50.0	23.1	က	10	15.0	8.1	29.2
Thomas ⁴	94.4	100.0	86,7	28.6	45.5	33.3	25.0	16.7	50.0	23.1	က	10	20.4	2.7	34.7
Majority	50.0	88.9	53.3	55.6	50.0	33.3	50.0	33.3	57.1	61.5	8	5	31.1	30.4	43.9
Split	25.0	83.3	33.3	40.0	50.0	0.0	50.0	25.0	16.7	62.5	ß	က			
Unanimous	87.5	100.0	83.3	75.0	50.0	0.09	50.0	50.0	87.5	60.0	က	2			

) = no data available or could not calculate with available data

¹ Justice Breyer replaced Justice Blackmun in 1994 ² Justice Ginsburg replaced Justice White in 1993 ³ Justice Souter replaced Justice Brennan in 1990

Justice Souter replaced Justice Brennan in 1990 ⁴ Justice Thomas replaced Justice Marshall in 1991



			Mean Table 7		
		S	Statutory Civil Rights Claims	aims	
Justice	Mean Voting Percentage	99% Confidence	Standard	Actual Voting Percentage	Did This Term Show a Statistically
	All Prior Terms (μ)	Interval for True Mean	Deviation of μ (s)	This Term (X2)	Significant Change In Voting Behavior?
Kennedy	42.4	+/- 13.3	16.32	61.54	Ves
O'Connor	47.8	4/- 8.6	11.09	41.67	000
Rehnquist	38.1	+/- 7.3	9.38	30.77	Sey Nes
Scalia	41.2	9.6-/+	12.37	23.08	892
Stevens	7.77	+/- 8.1	9.97	84.62	
Breyer	81.3	+/- 8.4	5.62	84.62	2
Ginsburg	66.2	+/- 19.7	15.32	76.92	OU
Thomas	33.2	+/- 13.3	12.61	23.08	OU
Souter	6'09	+/- 18.0	18.47	76.92	ou

() = no data available or could not calculate with available data

			&	Regression Table 7	2:			
			Statutor	Statutory Civil Rights Claims	laims			
			8	Correlation (p)/R	F2			
Justice	Kennedy	O'Connor	Rehnquist	Scalia	Stevens	Breyer	Ginsburg	Thomas
O'Connor								
Rehnquist								
Scalia				``				
Stevens				: : : :				
Breyer					1.00/1.00			
Ginsburg					0.90/0.75			
Thomas		0.70/0.39		0.89/0.74				
Souter							0.94/0.85	
/) = no data available or could not calculate	allable or coult	4 not coloured	otop oldoliono deta	,				

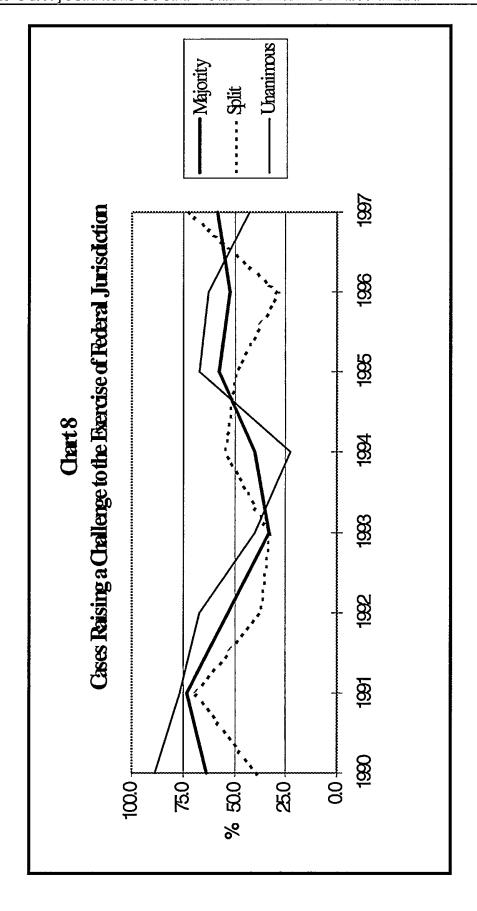
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							Date	Data Table 8	8						
				Case	Cases Raising a Challenge to the Exercise of Federal Jurisdiction	g a Cha	llenge to	the Ex	ercise o	f Federa	al Jurisd	iction			
Justice			0`	% Votes for Rights Claim	for Righ	ts Claim				X2	1997 Term	Term	Ē	Predictions	દા
											>	Votes			
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	For	Against	Prediction	Error	Prediction
	Term	Term	Term	Term	Term	Term	Term	Term	Term	Term	Claim	Claim	1997		1998
Souter ¹	66.7	87.5	57.6	75.0	56.3	33.3	30.0	68.4	56.5	60.7	17	11	51.9	8.8	09
Rehnquist	51.4	60.0	54.3	62.1	54.6	22.2	30.0	42.9	56.5	0.09	18	12	43.3	16.7	53.9
Kennedy	51.4	64.0	58.3	73.3	51.5	33.3	40.0	57.1	56.5	58.6	17	12	54.9	3.7	59.4
Ginsburg ²	62.2	68,0	63.9	0.69	9,09	33.3	36.8	68.4	56.5	55.2	16	5	0	0	62.8
Stevens	73.0	68.0	91.4	75.0	69.7	44.4	42.1	75.0	9.69	51.7	15	4	65.8	-14.1	60.0
Breyer ³	64.9	79.2	80.0	71.4	66.7	50,0	33.3	63.2	65.2	51.7	15	4	0	0	0
Thomas ⁴	75,0	87.5	85.7	2.99	54.6	33.3	30.0	42.9	47.8	46.7	14	10	46.6	0.1	44
O'Connor	51.4	68.0	54.3	63.3	53.1	22.2	40.0	47.6	54.6	43.3	13	17	48.4	ŗ.	42.9
Scalia	50.0	60.0	48.5	55.2	51.5	22.2	35.0	42.9	47.8	43.3	13	17	43.6	-0.3	40.1
Majority	62.2	64.0	63.9	73.3	52.9	33.3	40.0	57.1	52.2	58.6	17	12	51.4	7.2	62.6
Split	62.5	33.0	38.9	69.2	37.5	33.3	54.6	50.0	28.6	73.3	-	4			
Unanimous	61.9	81.3	88.9	76.5	66.7	40.0	22.3	66.7	62.5	42.9	9	8			
()	. 1 1 1 1	1 1	1.1		.,,										

() = no data available or could not calculate with available data

¹ Justice Souter replaced Justice Brennan in 1990 ² Justice Ginsburg replaced Justice White in 1993

³ Justice Breyer replaced Justice Blackmun in 1994 ⁴ Justice Thomas replaced Justice Marshall in 1991



		Cases Ra	Regression Table 8 Cases Raising a Challenge to the Exercise of Federal Jurisdiction	Regression Table 8 lenge to the Exercise Correlation (a) / R ²	le 8 cise of Federa R²	al Jurisdiction		
Justice	Kennedy	O'Connor	Rehnquist	Scalia	Stevens	Breyer	Ginsburg	Thomas
O'Connor	0.84/0.68	· ~ / **	entendend gegeneration to gradulate and the second and the second	naŭ e delje stoppeder Pomer e deljesta da dage	erie de la company de la compa	त्ये तत्त्र के क्षेत्र के प्रत्ये के स्वार्थिक के ब्राप्त के कि कि के प्रतिकार के कि कि कि कि कि कि कि कि कि क जिस्सान के कि के कि	د درون درون که درون درون درون درون درون که درون درون درون درون	\$1.53\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
Rehnquist	0.89/0.76	`	をいっています。 「「「「「「」」」」というない。 「「」」というない。 「」」というない。 「」、「」」というない。 「」」というない。 「」、「」」というない。 「」」というない。 「」、「」、「」、「」、「」、「」、「」、「」、「」、「」、「」、「」、「」、「			1 (3) 1		
Scalia	0.81/0.61	0.98/0.95	0.90/0.79					
Stevens								
Breyer	0.87/0.63	0.88/0.66		0.92/0.78	0.94/0.83			
Ginsburg	0.92/0.80	0.77/0.46	0.72/0.36	0.82/0.56	0.91/0.76	0.90/0.71	The second secon	
Thomas	0.88/0.73	0.84/0.65	0.86/0.68	0.87/0.72	0.78/0.53	0.87/0.63	0.81/0.54	
Souter	0.94/0.86	0.78/0.54	0.82/0.63	0.81/0.59	0.72/0.44	0.88/0.65	0.97/0.93	0.84/0.65

() = no data available or could not calculate with available data

		Cases Ba	Re Ising a Challer	Regression Table 8	Regression Table 8 Cases Baising a Challenge to the Exercise of Federal Jurisdiction	l Jurisdiction		
			Co	Correlation (p) / R²	R²			
Justice	Kennedy	O'Connor	Rehnquist	Scalia	Stevens	Breyer	Ginsburg	Thomas
O'Connor	0.84/0.68							
Rehnquist	0.89/0.76	0.86/0.72	3		· ·		`	`
Scalia	0.81/0.61	0.98/0.95	0.90/0.79	``				
Stevens								
Breyer	0.87/0.63	0.88/0.66		0.92/0.78	0.94/0.83		,	
Ginsburg	0.92/0.80	0.77/0.46	0.72/0.36	0.82/0.56	0.91/0.76	0.90/0.71		
Thomas	0.88/0.73	0.84/0.65	0.86/0.68	0.87/0.72	0.78/0.53	0.87/0.63	0.81/0.54	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Souter	0.94/0.86	0.78/0.54	0.82/0.63	0.81/0.59	0.72/0.44	0.88/0.65	0.97/0.93	0.84/0.65

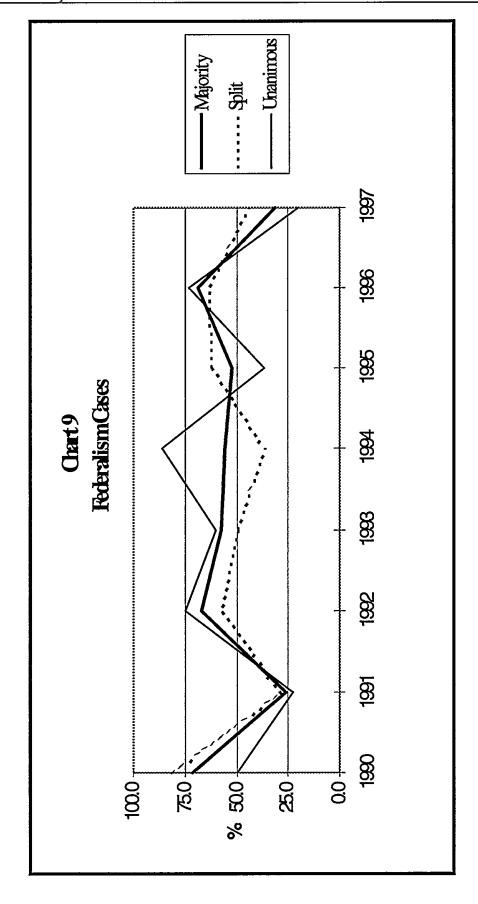
() = no data available or could not calculate with available data

							Data	Data Table 9	6						
							Federa	Federalism Cases	ses						
Justice			1%	% Votes for	for Rights State Claim	State Cl	aim			X2	1997 Term	Term	_	Predictions	SI
											×	Votes			
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	For	Against	Prediction	Error	Prediction
	Term	Term	Term	Term	Term	Term	Term	Term	Term	Term	State	State	1997		1998
Kennedy	72.7	56.3	71.4	26.1	0.09	42.9	55.6	51.9	68.3	42.1	8	11	51.4	-9.3	64.8
Rehnquist	81.0	56.3	71.4	43.5	73.3	71.4	72.2	51.9	75.6	36.8	7	7	0	0	72.8
Ginsburg ¹	63.6	43.8	57.1	30.4	66.7	57.1	50.0	38.5	51.3	36.8	7	12	0	0	46.2
Thomas ²	33.3	37,5	14.3	35.0	66.7	42.9	72.2	56.0	73.2	36.8	7	12	64.8	-28.0	88.2
Stevens	57.1	43.8		31.8	0.09	57.1	55.6	29.6	45.0	35.0	7	13	43.3	-8.3	42.3
Scalia	76.2	56.3	71.4	26.1	0.09	57.1	81.3	55.6	73.2	31.6	9	13	57.7	-26.1	68.7
O'Connor	73.7	56.3		39.1	73.3	57.1	55.6	44.4	70.7	29.4	ເວ	12	42.6	-13.2	9.99
Breyer ³	40.9	43.8	14.3	43.5	53.3	71.4	38.9	34.6	50.0	15.8	က	16	0	0	0
Souter⁴	31.8	37.5	83.3	36.4	60.0	57.1	44.4	34.6	43.9	15.8	3	16	0	0	34.6
Majority	59.1	43.8	71.4	26.1	66.7	57.1	55.6	51.9	68.3	31.6	9	13	0	0	65.1
Split	50.0	25.0	80.0	28.6	57.1	50.0	36.4	62.5	63.2	44.4	4	ល			
Unanimous	70.0	50.0	50.0	22.2	75.0	60.0	85.7	36.4	72.7	20.0	2	8			

= no data available or could not calculate with available data

Justice Ginsburg replaced Justice White in 1993

² Justice Thomas replaced Justice Marshall in 1991 ³ Justice Breyer replaced Justice Blackmun in 1994 ⁴ Justice Souter replaced Justice Brennan in 1990



			Mean Table 9		
			Federalism Cases		
Justice	Mean Voting Percentage	99% Confidence	Standard	Actual Voting Percentage	Did This Term Show a Statistically
	All Prior Terms (μ)	Interval for True Mean	Deviation of μ (s)	This Term (X2)	Significant Change in Voting Behavior?
Kennedy	53.8	+/- 12.8	15.76	42.11	yes
O'Connor	57.5	+/- 12.1	14.83	29.41	yes
Rehnquist	64.3	+/- 11.0	13.46	36.84	yes
Scalia	58.8	+/- 15.0	18.40	31.58	yes
Stevens	45.5	4/- 9.8	12.07	35.00	yes
Breyer	41.2	+/- 11.8	7.95	15.79	yes
Ginsburg	49.2	+/- 10.0	7.80	36.84	ou
Thomas	27.7	+/- 16.8	15.93	36.84	yes
Souter	51.4	+/- 16.6	17.02	15.79	yes

() = no data available or could not calculate with available data

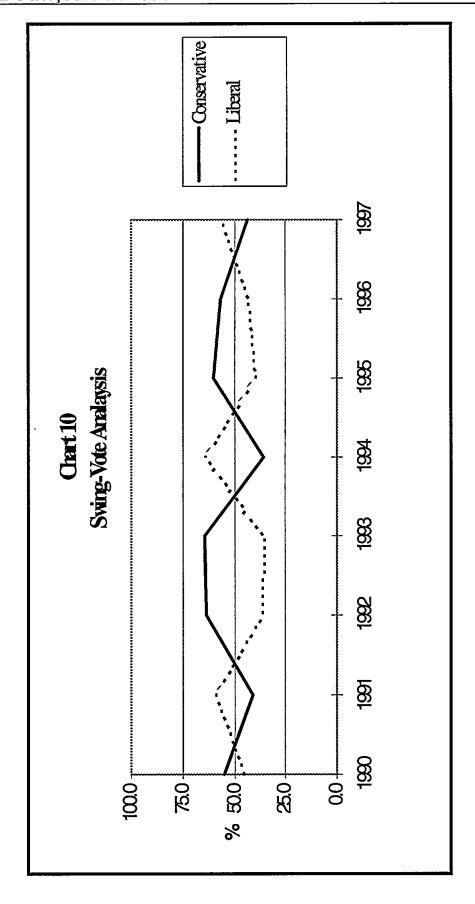
			Regre	Regression Table 9				
			Co	rederalism Correlation (p) / R²	R ²			
Justice	Kennedy	O'Connor	Rehnquist	Scalia	Stevens	Breyer	Ginsburg	Thomas
O'Connor	0.86/0.71		,			,		
Rehnquist	0.79/0.58	0.93/0.86						
Scalia	0.88/0.74	0.83/0.66	0.90/0.79					
Stevens								
Breyer	0.97/0.92	0.98/0.93	0.94/0.82	99.0/88.0				
Ginsburg		0.81/0.54	0.90/0.75		0.91/0.76	0.85/0.57		
Thomas	0.91/0.80	0.78/0.53	0.78/0.53	0.91/0.79		0.95/0.85		
Souter		0.82/0.63	0.74/0.48			0.94/0.83	0.92/0.80	

() = no data available or could not calculate with available data

							Data	Data Table 10							
			Swing	3-Vote A	nalysis:	Who Vc	tes Mos	t Often	with the	Majority	y in Clos	Swing-Vote Analysis: Who Votes Most Often with the Majority in Close Cases?			
Justice			%	% Votes with the Majority	with the	Majority				X2	1661	1997 Term	Pi	Predictions	s
											Š	Votes			
	1988	6861	0661	1661	1992	1993	1994	1995	9661	1997	For	Against	Prediction	Error	Prediction
	Term	Term	Term	Term	Term	Term	Term	Term	Term	Term	Maj.	Maj.	1997		8661
Kennedy	82.4	71.4	52.2	64.7	72.7	92.9	81.3	85.0	81.3	87.5	14	2	87.3	0.2	83.9
Rehnquist	76.5	2.99	9.69	41.2	72.7	71.4	62.5	75.0	62.5	56.3	6	7	66.69	-13.7	57.9
Breyer*	38.2	33.3	47.8	70.6	31.8	35.7	43.8	25.0	43.8	56.3	6	7	0	0	0
Ginsburg*	76.5	78.6	6'09	64.7	54,6	35.7	50.0	30.0	31.3	56.3	6	7	0	0	0
Thomas*	23.5	35.7	43,5	23.5	72.7	57.1	50.0	75.0	56.3	56.3	6	7	0	0	0
O'Connor	76.5	0.69		58.8	40.9	57.1	68.8	80.0	75.0	53.3	∞	7	74.7	-21.4	48.5
Scalia	73.5	66.7	52.2	35.3	81.8	71.4	56.3	75.0	56.3	50.0	∞	8	67.1	-17.1	52.4
Stevens	26.5	42.9	47.8	58.8	40.9	35.7	50.0	25.0	50.0	43.8	7	6	30.5	13.3	42.0
Souter*	26.5	35.7	59.1	82.4	31.8	42.9	37.5	30.0	43.8	43.8	7	6	21.8	22.0	41.4
Conservative	76.5	64.3	54.5	41.2	63.6	64.3	35.7	0.09	56.3	43.7	7	6	56.8	-13.1	52.9
Liberal	23.5	35.7	45.5	58.8	36.4	35.7	64.3	40.0	43.7	56.3	6	7	50.4	5.9	47.1

() = no data available or could not calculate with available data

* Justice Souter replaced Justice Brennan in 1990
Justice Thomas replaced Justice Marshall in 1991
Justice Ginsburg replaced Justice White in 1993
Justice Breyer replaced Justice Blackmun in 1994



			Mean Table 10		
		Swing-Vote Analysis: Who	Votes Most Often wil	Swing-Vote Analysis: Who Votes Most Often with the Majority in Close Cases?	2
Justice	Mean Voting Percentage	99% Confidence	Standard	Actual Voting Percentage	Did This Term Show a Statistically
	All Prior Terms (μ)	Interval for True Mean	Deviation of μ (s)	This Term (X2)	Significant Change in Voting Behavior?
Kennedy	75.5	+/- 9.4	11.58	87.50	уеѕ
O'Connor	66.0	+/- 9.3	11.45	53.33	yes
Rehnquist	66.8	+/- 8.3	10.16	56.25	yes
Scalia	63.5	+/- 11.1	13.66	50.00	yes
Stevens	43.9	+/- 10.0	12.26	43.75	OU
Breyer	37.5	+/- 16.1	10.83	56.25	OU
Ginsburg	36.7	+/- 11.8	9.17	56.25	yes
Thomas	55.8	+/- 19.6	18,61	56.25	no
Souter	46.8	+/- 17.9	18,41	43.75	ou

() = no data available or could not calculate with available data

			Rei	Regression Table 10	e 10			
	Ó	Swing-Vote Ana	Analysis: Who Votes Most Often with the Majority in Close	es Most Often	with the Major	ity in Close		
	•		Co	Correlation (p)/R2	R²			
Justice	Kennedy	O'Connor	Rehnquist	Scalia	Stevens	Breyer	Ginsburg	Thomas
O'Connor								
Rehnquist								
Scalia			0.89/0.77					
Stevens								,
Breyer		-0.89/0.70	-1.00/0.99	-0.98/0.94	0.75/0.34			```
Ginsburg			-0.77/0.46	-0.73/0.37		0.79/0.43		,
Thomas			0.92/0.83	0.90/0.78	-0.84/0.64	-0.79/0.44		
Souter			-0.78/0.55	-0.83/0.65	0.73/0.45	0.90/0.71		-0.94/0.85
,								

() = no data available or could not calculate with available data

B. Analysis

Table 1: Civil—State Party

This Term resulted in a marked decrease in favorable decisions for state governments, as evidenced by Data Table 1 and Chart 1.⁴² However, this was not particularly significant as the Court merely dropped back to historical norms. In fact, none of the Justices' scores varied to a statistically significant degree from their past voting records. Although there had been increasing support for state governments the past three Terms, the Court swung back down and recorded a record low in the "Split Decisions" category, voting for the state only 33.3% of the time. This dip in state support is indicative of the more liberal stance apparent during the 1997 Term.

Individually, all nine Justices voted against the state more often than last Term. In fact, the ordering of the Justices was identical to last Term. This liberal result was a bit of a surprise. Only Justice Scalia voted predictably, finding for the state government in 60% of the cases. Chief Justice Rehnquist remained the most conservative Justice in civil cases involving state governments, tying with Justice Scalia. However, his support declined more than that of any other Justice this Term, dropping 24.9% compared with last Term.

Statistically predicted voting patterns for 1997 were too liberal for the most part. Only Justice Scalia's voting behavior was predicted within 5%. Chief Justice Rehnquist and Justices Kennedy, Souter, and Stevens all voted more conservatively than predicted, voting for state governments 17.1%, 14.7%, 15.6%, and 17.6% more often than predicted, respectively. The only Justices voting more liberally than predicted were Justices O'Connor and Thomas. Justice O'Connor, predicted to vote for the state 74.5% of the time for the state, instead voted that way only 53.3% of the time. Justice Thomas voted for state governments 17.7% less often than predicted.

As with last Term, the most notable voting correlations in this category are between Justices Ginsburg and Stevens. This pairing showed an adjusted r² statistic of 96%, equaling last Term. This high r²

^{42.} Cases decided in favor of state governments: Bogan v. Scott-Harris, 118 S.Ct. 966 (1998); County of Sacramento v. Lewis, 118 S.Ct. 1708 (1998); Gebser v. Lago Vista Independent School District, 118 S.Ct. 1989 (1998); Ohio Forestry Ass'n v. Sierra Club, 118 S.Ct. 1665 (1998); South Dakota v. Yankton Souix Tribe, 118 S.Ct. 789 (1998); Wisconsin Department of Corrections v. Schacht, 118 S.Ct. 2047 (1998). Cases decided against state governments: Crawford v. Britton, 118 S.Ct. 1584 (1998); Faragher v. City of Boca Raton, 118 S.Ct. 2275 (1998); Foster v. Love, 118 S.Ct. 464 (1998); Lunding v. New York Tax Appeals Tribunal, 118 S.Ct. 766 (1998); Pa. Department of Corrections v. Yeskey, 118 S.Ct. 1952 (1998); Phillips v. Washington Legal Found., 118 S.Ct. 1925 (1998).

statistic indicates that this pair's scores vary from one Term to another in such a way that the score of one Justice may be predicted with a high degree of accuracy based on the score of the other. Correlation does not, however, imply causation.

Table 2: Civil—Federal Party

This Term found the Court's support of the federal government in civil cases continuing to dwindle.⁴³ Seven of the nine Justices voted less often for the federal government this Term than they did last Term. The "Majority All Cases" support for the federal government fell to an unprecedented low of 36.4%. Similarly, "Split" decisions favored the federal government only in 26.7% of the cases, another all-time low. In "Unanimous" cases, the Court supported the federal government only 57.1% of the time, compared to 70% last Term. Moreover, although decisions opposing a generally liberal administration might ordinarily be indicative of a conservative rather than liberal Court, this Term's cases were decided on traditionally liberal grounds, indicating a truly liberal ideological stance of the Court. For example, in four decisions, the Court expanded standing, voting in a traditionally liberal manner.⁴⁴ In another, the Court voted to protect jury verdicts—another traditionally liberal outcome.⁴⁵

Individually, typically liberal Justices Breyer and Stevens voted the second and third most conservatively, supporting the federal government in 57.1% and 55% of the cases, respectively. Justice O'Connor recorded her second highest mark ever, voting for the gov-

^{43.} Cases decided in favor of the federal government: Allentown Mack Sales & Service, Inc. v. National Labor Relations Board, 118 S.Ct. 818 (1998); Atlantic Mutual Insurance Co. v. Commissioner of Internal Revenue, 118 S.Ct. 1413 (1998); City of Chicago v. International College of Surgeons, 118 S.Ct. 523 (1998); Kiowa Tribe v. Manufacturing Technologies, 118 S.Ct. 1700 (1998); LaChance v. Erickson, 118 S.Ct. 753 (1998); National Endowment for the Arts v. Finley, 118 S.Ct. 2168 (1998); Regions Hospital v. Shalala, 118 S.Ct. 909 (1998); United States v. Beggerly, 118 S.Ct. 1862 (1998); United States v. Bestfoods, 118 S.Ct. 1876 (1998). Cases decided against the federal government: Allentown Mack Sales & Service, Inc. v. National Labor Relations Board, 118 S.Ct. 818 (1998); California v. Deep Sea Research, Inc., 118 S.Ct. 1464 (1998); Clinton v. City of New York, 118 S.Ct. 2091 (1998); Eastern Enter. v. Apfel, 118 S.Ct. 2131 (1998); FEC v. Atkins, 118 S.Ct. 1777 (1998); Forney v. Apfel, 118 S.Ct. 1984 (1998); National Credit Union Ass'n v. First Nat'l Bank and Trust, 118 S.Ct. 927 (1998); Hetzel v. Prince William County, Va., 118 S.Ct. 1210 (1998); Kalina v. Fletcher, 118 S.Ct. 502 (1998); Miller v. Albright, 118 S.Ct. 1428 (1998); United States v. United States Shoe Corp., 118 S.Ct. 1290 (1998).

^{44.} See, e.g., Clinton v. City of New York, 118 S.Ct. 2091 (1998); Eastern Enter. v. Apfel, 118 S.Ct. 2131 (1998); FEC v. Atkins, 118 S.Ct. 1777 (1998); Forney v. Apfel, 118 S.Ct. 1984 (1998); National Credit Union Ass'n v. First Nat'l Bank and Trust, 118 S.Ct. 927 (1998).

^{45.} See Hetzel v. Prince William County, Va., 118 S.Ct. 1210 (1998).

ernment 61.9% of the time. Conversely, Chief Justice Rehnquist and Justices Thomas and Kennedy recorded their lowest scores ever, voting for the federal government in 38.1%, 33.3%, and 45.5% of the cases, respectively. Chief Justice Rehnquist's support for the government declined the most this Term, falling from last Term's second place position at 69.6% all the way to the second to last this Term with a 38.1% score.

Justice Scalia was the only Justice to exhibit predictable voting behavior, voting for the federal government in 52.4% of the cases. With the exception of Justices Scalia and O'Connor, all of the predictions for this Term were too conservative. There were no particularly noteworthy correlations this Term. Justices Ginsburg and Kennedy had the highest voting correlation with an adjusted r² statistic of 92%.

Table 3: State Criminal Cases

The support for states in criminal cases continued to increase, rising by the second largest margin since the 1992 Term. In fact, as Data Table 3 and Chart 3 show, this category served as the only truly conservative indicator in the entire study, with the Court voting for the states in the "Majority All Cases" category 71.4% of the time. This score marked the second highest total ever, only eclipsed by the 1992 score of 77.3%. Similarly, in "Unanimous" decisions, the Court voted as a whole for the states a record 80% of the time, increasing 46.7% from the previous Term. However, in "Split" decisions, there was a liberal movement, with results favoring the states in only 66.7% of the cases, compared to 100% last Term.

A moderately conservative trend was evidenced by the increase of every Justices' score, except Justice Ginsburg's, in favor of the states. Even though Justice Thomas reclaimed the top position, he needed an increase in state support of over 29% to do so. In addition, Justice Scalia's second position score was his second highest ever at 84.6%. Justice Kennedy's support for states in criminal cases similarly increased from 54.6% last Term to 76.9% this Term, placing him in third position. Justice Stevens continued to vote predictably, support-

^{46.} Cases decided in favor of the states: Breard v. Greene, 118 S.Ct. 1352 (1998); Buchanan v. Angelone, 118 S.Ct. 757 (1998); Calderon v. Thompson, 118 S.Ct. 1489 (1998); Hopkins v. Reeves, 118 S.Ct. 1895 (1998); Monge v. California, 118 S.Ct. 2246 (1998); New Mexico v. Reed, 118 S.Ct. 1860 (1998); Ohio Adult Parol Authority v. Woodard, 118 S.Ct. 1244 (1998); Spencer v. Kemna, 118 S.Ct. 978 (1998); United States v. Ramirez, 118 S.Ct. 992 (1998). Cases decided against the states: Campbell v. Louisiana, 118 S.Ct. 1489 (1998); Woodard, 118 S.Ct. 1244; Stewart v. Martinez-Villareal, 118 S.Ct. 1618 (1998); Trest v. Cain, 118 S.Ct. 478 (1998).

ing the states in only 23.1% of the cases. This behavior varied from his predicted score by only 0.07%. Chief Justice Rehnquist was also quite predictable with his score varying only 4.1% from our prediction. In what proved to be a traditionally liberal Term, the criminal state cases category stood alone among all the categories in indicating conservative movement by the Court.

Table 4: Federal Criminal Cases

Data Table 4 and Chart 4 demonstrate the Court's continuing support for the federal government in criminal cases.⁴⁷ In the "Unanimous" category, the Court voted for the federal government 100% of the time. This score was matched only by last year's equally conservative score. However, despite this conservative indication, the "Majority All Cases" and "Split" decision categories show a more liberal trend away from governmental support, with declining scores of 80% and 66.7%, respectively. Therefore, despite overall conservative scores, a slightly liberal trend may be detected.

Justice Kennedy recorded his highest score ever for this category, supporting the federal government in criminal cases 90% of the time, compared to 84.6% last Term. Similarly, Justice Thomas recorded his highest mark ever, also voting for the federal government in 90% of the cases. Despite the typically standard orientation with the liberal Justices grouped at the bottom, Chief Justice Rehnquist fell to fourth position, with a 70% score, his second lowest ever. Of particular interest is the fact that two of the three top positions are occupied by the two most frequent swing voters on the Court, Justices Kennedy and O'Connor.⁴⁸

Chief Justice Rehnquist's voting behavior was the most predictable this Term. His score of 70% varied from his predicted score by only 1.9%. Likewise, Justice O'Connor's predicted score was accurate, varying from her actual score by only 4.9%. No voting correlations were particularly noteworthy this Term; yet, Justices Souter and Ginsburg's adjusted r² statistic was the most correlated for the fifth consecutive Term with a score of 82%.

^{47.} Cases decided in favor of the federal government: Almendarez-Torres v. United States, 118 S.Ct. 1219 (1998); Bates v. United States, 118 S.Ct. 285 (1998); Brogan v. United States, 118 S.Ct. 805 (1997); Bryan v. United States, 118 S.Ct. 1939 (1998); Hudson v. United States, 118 S.Ct. 488 (1997); Salinas v. United States, 118 S.Ct. 469 (1997); United States v. Scheffer, 118 S.Ct. 1261 (1998); Edwards v. United States, 118 S.Ct. 1475 (1998). Cases decided against the federal government: Bousley v. United States, 118 S.Ct. 1604 (1998); Lewis v. United States, 118 S.Ct. 1135 (1998).

^{48.} See supra Table 10 discussion.

Table 5: First Amendment

This Term, the Court decided only one case that touched on a First Amendment issue.⁴⁹ This lone data point makes it difficult, if not impossible, to draw any conclusions regarding ideological positions or trends in this category. Therefore, this year's First Amendment voting behavior might best be analyzed by considering it in conjunction with last Term's decisions.

Last Term we concluded that the "First Amendment faired poorly."⁵⁰ This statement continues to ring true. This Term, the Court weighed the constitutionality of a 1990 Congressional amendment to the National Foundation on the Arts and Humanities Act that directed the Chairperson of the National Endowment for the Arts to consider "decency" in selecting federal art grant recipients.⁵¹ The 1990 amendment was challenged on First Amendment grounds as being unconstitutionally vague and viewpoint based.⁵² Reversing the Ninth Circuit, Justice O'Connor determined that the amendment was not unconstitutional and did not, "on its face, impermissibly infringe on First [Amendment] rights."⁵³ Justice Souter, writing a lengthy opinion arguing in favor of the First Amendment claim, was the lone dissenter.⁵⁴

Several statistical outcomes may be worth noting. First the Court reached a nearly unanimous decision, with only Justice Souter dissenting. Full unanimity has evaded the Court on First Amendment issues since 1996.⁵⁵ Second, despite the scarcity of First Amendment cases this Term, the Court did continue its conservative trend, begun in 1995, of disfavoring First Amendment claims.⁵⁶ Finally, Data Table 5

^{49.} The only case decided was NEA v. Finley, 118 S.Ct. 2168 (1998).

^{50.} Wilkins, et al., supra note 1, at 91.

^{51.} See NEA v. Finley, 118 S.Ct. 2168 (1998).

^{52.} See id. at 2174.

^{53.} Id. at 2180.

^{54.} See id. at 2185-96 (Souter, J., dissenting). Souter argued that the constitutional principle which prohibits government suppression of ideas "simply because society find the idea itself offensive or disagreeable" applies not only to "affirmative suppression of speech, but also to disqualification for government favors...." Id. at 2185; cf. id. at 2183 (Scalia, J., concurring) ("[i]t is preposterous to equate the denial of taxpayer subsidy with measures 'aimed at the suppression of dangerous ideas'") (quoting Regan v. Taxation with Representation of Wash., 103 S.Ct. 1997 (1983), in turn quoting Cammarano v. United States, 79 S.Ct. 524, 533 (1959), in turn quoting Speiser v. Randall, 78 S.Ct. 1332, 1338 (1958)).

^{55.} See supra Chart 5 (the last time the Court unanimously decided a First Amendment issue was in the 1995 Term).

^{56.} See supra Chart 5 (noting that 1995 marked the Court's conservative shift from favoring First Amendment claims (liberal), which began in 1990, to disfavoring First Amendment claims (conservative) which has been the trend since 1995).

forecasts a continued decline in support for First Amendment claims,⁵⁷ with a predicted 1998 Term score of only about 10%–an all-time low for this Study.

Table 6: Equal Protection

The Court decided only two cases which touched on equal protection issues this Term.⁵⁸ As a result, the statistical problems previously described with respect to First Amendment cases this Term are also present in this category.⁵⁹ However, taken at face value, Data Table 6 and Chart 6 indicate slight liberal movement this Term.

In Campbell v. Louisiana, the Court exhibited a fairly predictable voting pattern, with two of the most conservative Justices, Justices Scalia and Thomas, casting the only votes against the equal protection claim. On the other hand, Chief Justice Rehnquist, who in two prior Terms failed to cast a single vote in favor of an equal protection claim, voted for the claim in Campbell v. Louisiana.

In *Miller v. Albright*, the Court divided into largely traditional voting alliances, but in an unusual manner.⁶² The Justices applied two different levels of scrutiny to the equal protection claim presented.⁶³ Among the Justices applying heightened scrutiny, a "plurality" composed of Justices Breyer, Ginsburg, and Souter voted in favor of the claim, while Justices Rehnquist and (somewhat surprisingly) Stevens cast conservative votes against the claim. The tables turned, however when Justices Kennedy and O'Connor voted conservatively against the equal protection claim, applying rational basis scrutiny. The net result⁶⁴ is that the equal protection claim lost, but on two different rationales, pursuant to two levels of scrutiny. This is perhaps most ef-

^{57.} See supra Data Table 5 (majority votes for First Amendment claims is predicted to be a mere 9.9%).

^{58.} See Campbell v. Louisiana, 118 S.Ct. 1419 (1998); Miller v. Albright, 118 S.Ct. 1428 (1998).

^{59.} See supra note 11.

^{60.} Campbell v. Lousiana, 118 S.Ct. 1419, 1426 (1998) (Thomas, J., dissenting in part, joined by Scalia, J.).

^{61.} See supra Data Table 6 (noting that in 1996 and in 1993, Chief Justice Rehnquist did not cast any votes in favor of an equal protection claim the Court decided, and in 1993 the Chief Justice was joined by Justices Scalia and Thomas in not casting any votes for equal protection claims).

^{62.} Miller v. Albright, 118 S.Ct. 1428 (1998).

^{63.} Five Justices (Rehnquist, Souter, Stevens, Ginsburg, and Breyer) applied heightened scrutiny. Two Justices (Kennedy and O'Connor) applied rational basis scrutiny. Id.

^{64.} The "net result" here assumes that the two rationales are combined and looks to the overall outcome of the equal protection claims.

fectively illustrated by the following chart recording the Justices' votes:

Equal	Protection Votes in I	Miller v. Albright
Justice	For Claim	Against Claim
Breyer	heightened scrutiny	
Ginsburg_	heightened scrutiny	
Kennedy		rational basis scrutiny
O'Connor		rational basis scrutiny
Rehnquist		heightened scrutiny
Scalia		
Souter	heightened scrutiny	
Stevens		heightened scrutiny
Thomas		

Note that Justices Scalia and Thomas did not address the equal protection issue presented in this case.⁶⁵ Nevertheless, as illustrated by the chart above, more votes were cast against Equal Protection issue than for it. For purposes of this Study, this result translates into the conservative "majority" vote against equal protection reflected in Data Table 6.⁶⁶ However, the question remains whether a majority of the Court reached a single decision contrary to the equal protection claim presented because this outcome depends on two different rationales spawned by two different levels of scrutiny.

Data Table 6 and Regression Table 6 indicate some interesting relationships. First, Data Table 6 shows that three traditionally liberal Justices—Breyer, Ginsburg, and Souter—have posted identical scores on equal protection issues since 1994.⁶⁷ This is mirrored on the conservative side by Justices Scalia and Thomas who, with one minor exception,⁶⁸ have scored identically on equal protection issues since

^{65.} Justices Scalia and Thomas did reach various other issues which touched on the Civil, Federal Party and Jurisdiction categories of this study. See id.

^{66.} See specifically where the "Majority" row and the "1997 Term Votes" column meet in Data Table 6, which indicates that the Court majority voted once for equal protection and once against it. The Majority vote for the equal protection claim was in *Campbell v. Louisiana*, 118 S.Ct. 1419 (1998), and the majority vote against the claim was in *Miller*, 118 S.Ct. 1428.

^{67.} See supra Data Table 6. Justices Ginsburg and Souter have voted identically since 1993.

^{68.} In 1995, Justice Scalia voted for equal protection claims 40% of the time while Justice Thomas voted for the claims 50% of the time. See id.

1992.⁶⁹ Regression Table 6 confirms these relationships. Such perfectly correlated voting patterns are found in only one other Regression Table.⁷⁰

Another noteworthy statistic is the Court's prolonged inability to reach a unanimous decision on equal protection issues. As indicated by Chart 6, the last time the Court unanimously decided an equal protection issue was in 1991.⁷¹

Data Table 6 also indicates that the study's 1997 prediction for Majority votes in favor of equal protection claims was 23.8 percentage points in error.⁷² This large error may be mostly explained by the lack of equal protection cases this Term (where each claim represents 50 percentage points).⁷³ The 1998 prediction for the Majority, 62.5% in favor of equal protection claims, still reflects the Court's overall tendency to decide these cases liberally.⁷⁴ This Term indicates a slight retraction from that trend.

Table 7: Statutory Civil Rights

Data Table 7 indicates moderate liberal movement in this category, which is harmonious with the Court's overall liberal trend since 1993.⁷⁵ The Majority decided 61.5% of all issues in favor of the statutory civil rights claims.⁷⁶ This liberal movement is supported by the Court's favorable outcome in 62.5% of the split decisions (up 45.8 percentage points from last Term).⁷⁷ Ideology is presumably more relevant in cases involving split decisions, making this considerable jump significant. This result also marks a considerable turnaround from the

^{69.} See id.

^{70.} See supra Regression Table 7 (indicating that Justices Stevens' and Breyer's voting patterns are perfectly correlated from Term to Term).

^{71.} See supra Chart 6.

^{72.} Supra Data Table 6.

^{73.} See id.

^{74.} See id.

^{75.} Supra Data Table 7.

^{76.} Cases decided in favor of statutory civil rights claims: Bragdon v. Abbott, 118 S.Ct. 2196 (1998); Crawford v. Britton, 118 S.Ct. 1584 (1998); Faragher v. City of Boca Raton, 118 S.Ct. 2275 (1998); Kalina v. Fletcher, 118 S.Ct. 502 (1998); Oncale v. Sundowner Offshore Serv., Inc., 118 S.Ct. 998 (1998); Oubre v. Entergy Operations, Inc., 118 S.Ct. 838 (1998); and Pa. Department of Corrections v. Yeskey, 118 S.Ct. 1952 (1998). Cases decided against statutory civil rights claims: Bogan v. Scott-Harris, 118 S.Ct. 966 (1998); County of Sacramento v. Lewis, 118 S.Ct. 1708 (1998); Gebser v. Lago Vista Ind't Sch. District, 118 S.Ct. 1989 (1998); and City of Monroe v. United States, 118 S.Ct. 400 (1997).

^{77.} See supra Data Table 7.

Court's largely conservative posture in split decision cases since 1990.⁷⁸

All of the Justices, save Justice Kennedy, dropped percentage points compared with last Term.⁷⁹ The drop among conservative Justices was considerably greater than it was among the liberal Justices. For example, three traditionally liberal Justices—Stevens, Breyer, and Ginsburg— dropped collectively only 3.9 percentage points.80 So slight is this drop that it does not indicate any significant movement among the liberal Justices. In contrast the four traditionally conservative Justices-Justices O'Connor, Rehnquist, Scalia, and Thomas-each individually dropped more than 22 percentage points. 81 This seems to indicate a significant conservative movement among the conservative Justices of the Court. This result is also reflected in Mean Table 7 which indicates statistically significant voting movement among Justices Kennedy, Rehnquist, and Scalia.82 Nevertheless, this conservative shift among conservative Court members ultimately proved inadequate to restrain the Court's overall liberal movement in this category.

Also noteworthy are several correlations in Term-to-Term voting scores among Justices at each end of the liberal/conservative spectrum. On the liberal side, Justices Stevens and Breyer showed identical voting percentages this Term as they have since 1994 when Justice Breyer joined the Court.⁸³ While this statistic does not indicate that the two Justices have voted exactly the same on every issue, a review of this Term's decisions indicates that they were on different sides of the controversy in only one of the eleven cases included in the Statutory Civil Rights category.⁸⁴ On the conservative side, Justices Scalia

^{78.} See id. (indicating that the Court has only been on the liberal side of split decision cases once since 1988 (not including this Term)).

^{79.} See id.

^{80.} See id.

^{81.} See id.

^{82.} Supra Mean Table 7.

^{83.} Supra Data Table 7.

^{84.} See City of Monroe, 118 S.Ct. 400 (Justice Breyer voting for the claim and Justice Stevens voting against the claim). While at first, this might indicate an error in voting tabulation, this apparent discrepancy can be resolved. Justice Stevens, in Jefferson v. City of Tarrant, Ala., 118 S.Ct. 481, 487-88 (1998), was the only Justice to reach the merits of the statutory civil rights claim and opined in favor of the claim. This gave Justice Stevens his "eleventh" vote in favor of statutory civil rights claims. Because a majority of Justices did not reach the merits of the claim, Jefferson was not included among statutory civil rights cases. Furthermore, in County of Sacramento v. Lewis, 118 S.Ct. 1708 (1998), every Justice but Justice Stevens reached the statutory civil rights issue and decided the case against the claim. Thus Justice Stevens did not accrue his "third" vote against statutory civil rights

and Thomas likewise show matching voting percentages this Term as they have since 1992. Again, this statistic alone does not indicate that the two Justices voted the same on every issue. However, unlike Justices Stevens and Breyer, a review of the decisions reveals that indeed Justices Scalia and Thomas voted identically on every statutory civil rights issue this Term, and in one case were even the lone conservative voices voting against the claim. 86

Predictions proved remarkably accurate for three Justices this Term. Justice Stevens' prediction was within 3.2 percentage points.⁸⁷ Even more accurate were our predictions for Justices O'Connor and Thomas's which came within 0.1 and 2.7 percentage points respectively.⁸⁸ However, the prediction for the Majority was 30.4 percentage points in error. Thus, predictions for the Court's liberal or conservative movement as a whole continues to be difficult to ascertain in this category.

Table 8: Jurisdiction

The Majority decided 58.6% of all jurisdiction claims in favor of the claim this Term, which is fairly close to par for the past decade. ⁸⁹ Perhaps the most significant change with respect to the Court's decisions this Term was the 44.7% increase in its split decisions. ⁹⁰ Though Data Table 8 shows that the Court tends to shift radically with respect

claims. The ultimate result was that Justices Stevens and Breyer's percentages and votes both for and against statutory civil rights claims are identical.

^{85.} See supra Data Table 7.

^{86.} See Faragher v. City of Boca Raton, 118 S.Ct. 2275 (1998) (Thomas, J., dissenting with Scalia, J., joining).

^{87.} See supra Data Table 7.

^{88.} Id

^{89.} Cases decided in favor of the exercise of jurisdiction: Air Line Pilots Ass'n. v. Miller, 118 S.Ct. 1761 (1998); Breard v. Greene, 118 S.Ct. 1352 (1998); California v. Deep Sea Research, Inc., 118 S.Ct. 1464 (1998); Campbell v. Louisiana, 118 S.Ct. 1419 (1998); City of Chicago v. Int'l College of Surgeons, 118 S.Ct. 523 (1998); Clinton v. City of New York, 118 S.Ct. 2091 (1998); FEC v. Akins, 118 S.Ct. 1777 (1998); Forney v. Apfel, 118 S.Ct. 1984 (1998); Hohn v. United States, 118 S.Ct. 1969 (1998); Hudson v. United States, 118 S.Ct. 488 (1998); Miller v. Albright, 118 S.Ct. 1428 (1998); National Credit Union Ass'n v. First Nat'l Bank and Trust, 118 S.Ct. 927 (1998); Stewart v. Martinez-Villareal, 118 S.Ct. 1618 (1998); and Wisconsin Dep't of Corrections v. Schacht, 118 S.Ct. 2047 (1998). Cases decided against the exercise of jurisdiction: Calderon v. Ashmus, 118 S.Ct. 1694 (1998); Calderon v. Thompson, 118 S.Ct. 1489 (1998); Jefferson v. City of Tarrant, 118 S.Ct. 481 (1998); Lexecon, Inc. v. Milberg Weiss Bershad Hynes & Lerach, 118 S.Ct. 956 (1998); Ohio Forestry Ass'n v. Sierra Club, 118 S.Ct. 921 (1998); Rivet v. Regional Bank of Louisiana, 118 S.Ct. 921 (1998); Rogers v. United States, 118 S.Ct. 673 (1998); Spencer v. Kemna, 118 S.Ct. 978 (1998); Steel Co. v. Citizens for a Better Env't, 118 S.Ct. 1003 (1998); Textron v. UAW, 118 S.Ct. 1626 (1998); and United States v. Beggerly, 118 S.Ct. 1862 (1998).

^{90.} See supra Data Table 8.

to split decisions in this category,⁹¹ this Term marks the Study's highest score ever in split decisions favoring the exercise of jurisdiction.⁹²

Worth noting is the relatively large sample of cases this category provides. In fact, at twenty-five cases this Term, the Jurisdiction category provides a larger sample than any other category. The benefit of a large pool is two-fold. First, because the sample is large, it is more likely that the Study's statistics will accurately reflect the trends in the Justices' and the Court's voting behavior. Second, a large sampling improves the accuracy of our predictions for future behavior.

The Court's minimal movement as a whole mirrors the Justices' individual movement. However, Mean Table 8 indicates Chief Justice Rehnquist and Justice Stephens' voting behavior significantly deviated from their previous averages. Chief Justice Rehnquist only moved 3.5 percentage points from last Term; however his score was his second highest ever recorded by the Study. In contrast, Justice Stevens dropped 17.9% from last year's position as the Justice most favorably disposed to exercise jurisdiction to this Term's middle of the road position.

Regression Table 8 indicates several Justices whose Term-to-Term voting movement is correlated. As previously explained, this table does not measure how often Justice's decide issues in an identical manner. Rather, it measures correlation in the movement of the Justices' Term-to-Term scores. Justices O'Connor and Scalia have an r² correlation of 0.95. Justices Ginsburg and Souter have an r² correlation of 0.93. Term-to-Term scores of 0.93. Ter

Predictions in this category are the most accurate of any in the Study. No prediction varied more than 17 percentage points from the actual outcome.⁹⁸ Furthermore, predictions for four Justices were

^{91.} See id. (indicating five 20 percentage point or more changes in split decision cases since 1988 (1998 to 1989, 1990 to 1991, 1991 to 1992, 1993 to 1994, and 1996 to 1997)).

^{92.} See id.

^{93.} See supra Mean Table 8.

^{94.} See supra Data Table 8.

^{95.} See supra Regression Table 8.

^{96.} See id.

^{97.} See id.

^{98.} See id. The Criminal Federal Cases category came close with its largest deviation from the prediction being 17.5 points. See supra Data Table 4. However, this category did succeed in this Term's most accurate prediction for Majority behavior deviating a mere 4.8 percentage points from the Majority's actual voting behavior. See id. Surprisingly, the Criminal Federal Cases category had a comparatively small sampling of only ten cases. See id.

within 5.1%,⁹⁹ and the prediction for the Majority score varied only 7.2% from the true outcome.

Table 9: Federalism

In contrast to the 1996 Term, Data Table 9 and Chart 9 this Term demonstrate a significant, Court-wide liberal shift on federalism issues. Description Every Justice this Term voted more often for the United States than last Term. In fact, four Justices— Justices Rehnquist, O'Connor, Breyer, and Souter—reached all-time lows for votes in favor of State. Even this Term's most conservative score, posted by Justice Kennedy, was more liberal (in favor of the United States), than last Term's most liberal score. Also, the Justices' positions collectively declined dramatically. In all types of cases—majority, split, and unanimous—the Court voted more liberally than it has since 1991. Mean Table 9 indicates that every Justice save Justice Ginsburg demonstrated a statistically significant liberal shift compared with his or her prior voting average. The most dramatic shifts were effected by Justice O'Connor Chief Justice Rehnquist who dropped 41.3% and 38.8% respectively from last Term.

This Term's significant liberal shift also resulted in a new non-tradition voting alliance. Last Term, the five traditionally most conservative Justices were at the top of the chart indicating their conservative stances on federalism issues. Since 1994, these five Justices have consistently dominated the top five conservative posi-

^{99.} See supra Data Table 8.

^{100.} Cases decided in favor of the states: Baker v. General Motors, 118 S.Ct. 657 (1998); Buchanan v. Angelone, 118 S.Ct. 757 (1998); Calderon v. Thompson, 118 S.Ct. 1489 (1998); City of Monroe v. United States, 118 S.Ct. 400 (1997); Montana v. Crow Tribe of Indians, 118 S.Ct. 1650 (1998); and South Dakota v. Yankton Souix Tribe, 118 S.Ct. 789 (1998). Cases decided in favor of the United States: AT&T v. Central Office Tel., Inc., 118 S.Ct. 1956 (1998); California v. Deep Sea Research, Inc., 118 S.Ct. 1464 (1998); City of Chicago v. Int'l College of Surgeons, 118 S.Ct. 523 (1998); Fidelity Fin. Services, Inc. v. Fink, 118 S.Ct. 651 (1998); Foster v. Love, 118 S.Ct. 464 (1998); Kalina v. Fletcher, 118 S.Ct. 502 (1998); Kiowa Tribe v. Mfg. Tech., 118 S.Ct. 1700 (1998); Lewis v. United States, 118 S.Ct. 1135 (1998); Lunding v. New York Tax Appeals Tribunal, 118 S.Ct. 766 (1998); Pa. Department of Corrections v. Yeskey, 118 S.Ct. 1952; and Trest v. Cain, 118 S.Ct. 478 (1997).

^{101.} See supra Data Table 9.

^{102.} See id.

^{103.} See id.

^{104.} See id.

^{105.} See supra Mean Table 9 (revealing Justice Ginsburg as the only Justice whose voting behavior did not statistically deviate from previous norms).

^{106.} See supra Data Table 9.

^{107.} See Wilkins, et al., supra note 1, at 78.

tions.¹⁰⁸ However, this Term, two traditionally liberal Justices, Justices Stevens and Ginsburg, rose into the fifth and third positions respectively. This movement might be explained in part by the Court's overall shift toward the liberal pole. In fact, Data Table 9 reveals that when the Court is moving conservatively on federalism issues,¹⁰⁹ the traditionally conservative Justices occupy the top conservative spots. In contrast, when the court moves liberally,¹¹⁰ at least a few traditionally liberal Justices occupy the top conservative slots of the Data Table.

Regression Table 9 indicates some high correlations among some rather ideologically diverse Justices. Justices Breyer and Kennedy have a r² correlation of .92 and Justices Breyer and O'Connor have a r² correlation of .93.¹¹¹

The rather erratic voting behavior in this category has made predicting outcomes difficult both for the Court as a whole and for the individual Justices. The prediction most closely approaching the actual 1997 outcome was for Justice Stevens with an error of 8.3 percentage points. Justice Kennedy's prediction was in error by only 9.3 percentage points However, Last Term predictions for four Justices and for the Majority in all cases were not available

Table 10: Swing Votes

Data Table 10 and Chart 10 indicate the voting scores for the eleven cases that were decided by a margin of one vote. Last Term's swing vote scores (56.3% conservative, 43.7% liberal) have been identically duplicated this Term, but in reversed positions. The

^{108.} See supra Data Table 9.

^{109.} Data Table 9 shows conservative movement by the Court from 1991 to 1992 (all cases), 1993 to 1994 (unanimous cases), 1994 to 1995 (split cases), and 1995 to 1996 (unanimous cases).

^{110.} Data Table 9 shows liberal movement by the Court from 1990 to 1991 (all cases) and again from 1992 to 1993 (all cases).

^{111.} See id.

^{112.} See id.

^{113.} See id.

^{114.} Swing-vote cases reaching a conservative outcome: Allentown Mack Sales & Service, Inc. v. NLRB, 118 S.Ct. 818 (1998); Almendarez-Torres v. United States, 118 S.Ct. 1219 (1998); Calderon v. Thompson, 118 S.Ct. 1489 (1998); Gebser v. Lago Vista Independent School District, 118 S.Ct. 1989 (1998); Monge v. California, 118 S.Ct. 2246 (1998); Ohio Adult Parol Auth. v. Woodard, 118 S.Ct. 1244 (1998). Swing-vote cases reaching a liberal outcome: Allentown Mack Sales & Service, Inc. v. NLRB, 118 S.Ct. 818 (1998); Bragdon v. Abbott, 118 S.Ct. 2196 (1998); Crawford v. Britton, 118 S.Ct. 1584 (1998); Eastern Enterprises v. Apfel, 118 S.Ct. 2131 (1998); National Credit Union Ass'n v. First Nat'l Bank & Trust, 118 S.Ct. 927 (1998); Ohio Adult Parol Auth. v. Woodard, 118 S.Ct. 1244 (1998); Phillips v. Washington Legal Foundation, 118 S.Ct. 1925 (1998).

12.4% differential between the scores remains the closest recorded in this Study, with the "Liberal Coalition" collecting the crucial fifth vote to "out-swing" the "Conservative Coalition" more often than not. This Term marked only the third time in the history of the Study that the "Liberal Coalition" prevailed more often in closely decided cases.

As predicted, Justice Kennedy is the Court's most influential swing voter for the fifth straight year, voting with the majority a record high 87.5% of the time. In fact, the swing-vote majority was only able to gather the crucial fifth vote in two of the swing cases without the vote of Justice Kennedy. Justice O'Connor fell from her typical second place position, voting with the majority only 53.3% of the time, compared to 75% last Term. Justices Breyer and Ginsburg tied for the third position, voting with the majority 56.3% of the time and marking all-time high scores for each of them. The most notable voting correlations in this category are between Justice Breyer and Chief Justice Rehnquist. This pairing shows an adjusted r² statistic of 99%. The correlation is actually an inverse one, meaning that as one participates in more swing coalitions, the other participates less.

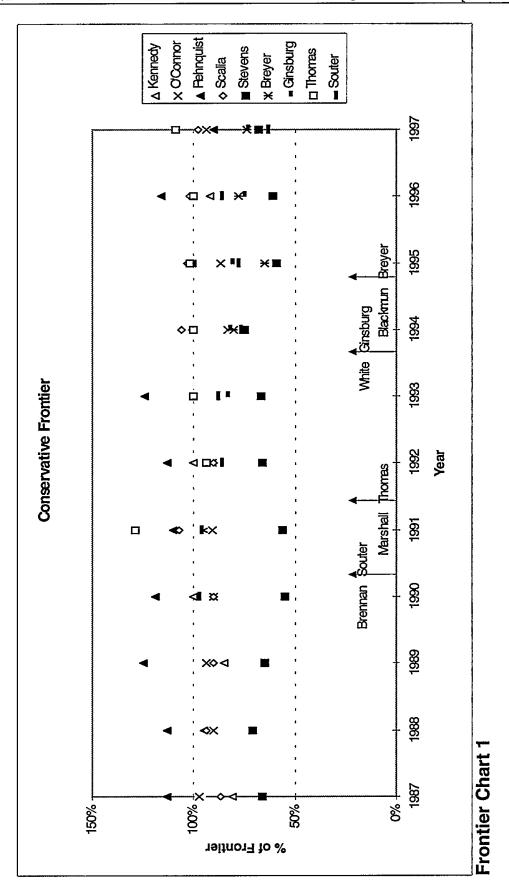
This Term marked another year in which neither coalition possessed marked power (deciding a clear majority of the swing-vote cases). However, the unsteady and apparently diminishing power of conservative coalitions suggests that the Rehnquist Court will continue to become less conservative.

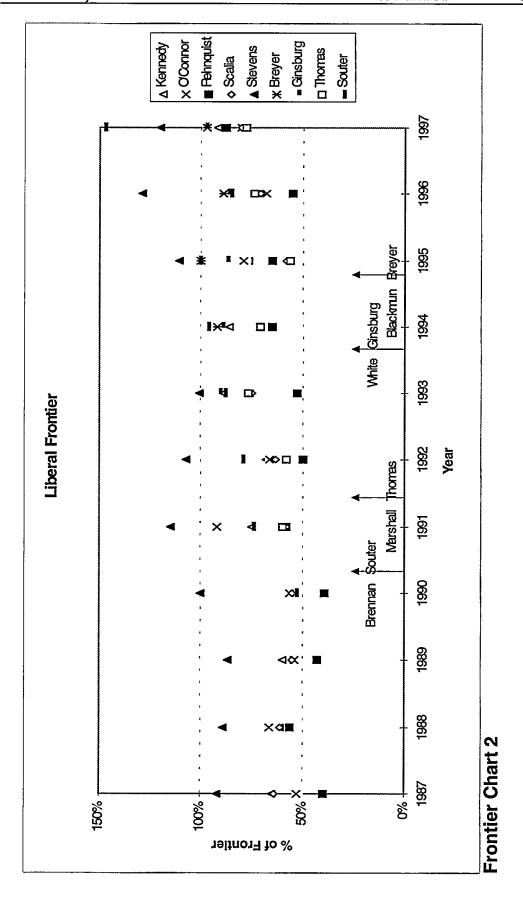
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			State	Federal	State	Federal		Protect.	Ħ		
Thomas	100%	109%	ŧ	,	100%		ı		1		1
Scalia	%86		25%	1	25%			•	25%	25%	
O'Connor	94%		13%	13%	13%	13%	13%	1	13%	13%	13%
Kennedy	%06		13%	13%	13%	13%	13%	ŧ	13%	13%	13%
Rehnquist	%06		13%	13%	13%	13%	13%	ı	13%	13%	13%
Breyer	74%		13%	13%	13%	13%	13%	ı	13%	13%	13%
Ginsburg	73%		13%	13%	13%	13%	13%	,	13%	13%	13%
Stevens	%89		13%	13%	13%	13%	13%	ı	13%	13%	13%
Souter	%89		20%	•	20%	20%	•	•	20%	20%	•

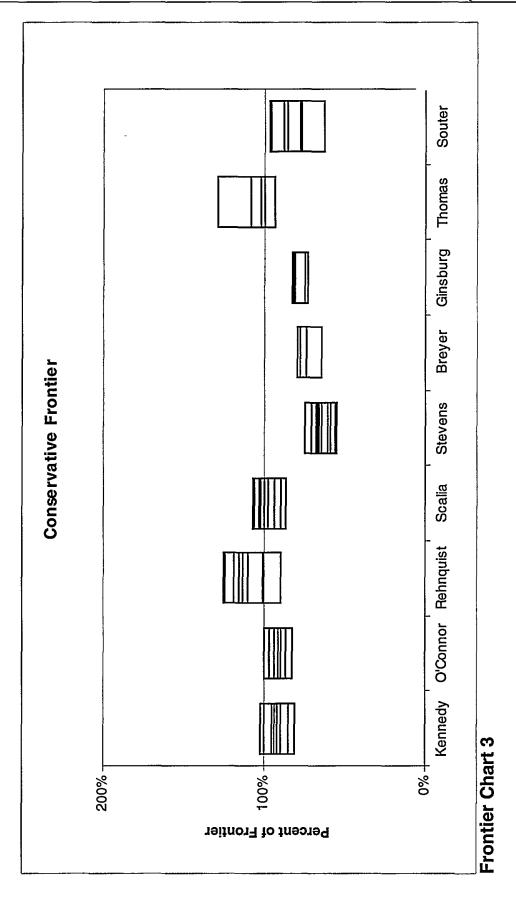
				Fron "Libera	tier Anal	Frontier Analysis Table 2 "Liberal Frontier"-Constrained	le 2 ained				
Justice	%	%				Cat	Category Weights	hts			
	of Frontier	Super- Eff.		:							
			Civil/	Civil/	Crim/	Crim./	1st Am.	Equal	Stat. Civ.	Juris.	Fed'ism
			State	rederal	State	rederal		Protect.	Ĭ.		
Souter	100%	147%	19%	5%	•	19%	19%	2%		19%	19%
Stevens	100%	120%	ı	•	20%		•	•	20%	•	•
Breyer	%26		24%	ı	3%	24%	ı	t	3%	24%	24%
Ginsburg	%26		30%	2%	0	30%	2%	2%	1	30%	%
Kennedy	85%%		%09	ı	:	ı	ı	ı		20%	ı
Rehnquist	%88		20%	ı	1	1	ı	t	t	20%	ı
Scalia	%08		72%	ı	•	25%	1	•	•	22%	25%
O'Connor	%%08		33%	•	•	22%	1	ı	ı	22%	25%
Thomas	%92		20%		•		•	•		505	•

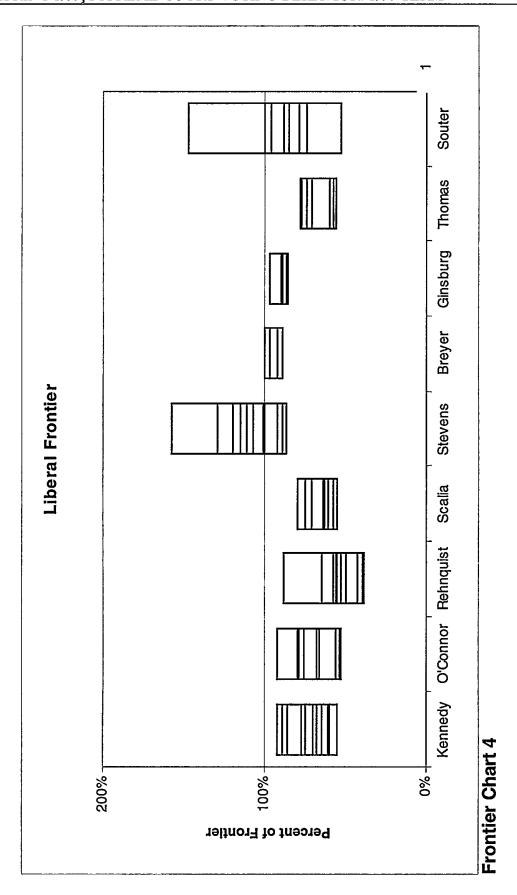
			<u>)</u>	Frontier Analysis Table 3 "Conservative Frontier"—Unconstrained	tier Anal ive Fronti	Frontier Analysis Table 3 ervative Frontier"-Unconst	e 3 nstrainec				
Justice	%	%				Cate	Category Weights	nts			
	of Frontier	Super- Eff.									
			Civil/	Civil/	Crim/	Crim./	1st Am.	Equal	Stat. Civ.	Juris.	Fed'ism
			State	Federal	State	Federal		Protect.	Rţ.		
Scalia	100%	121%		64%				36	·		•
Thomas	100%	118%	ı	•	•	%99	ı	1%	33%	ı	ı
Kennedy	100%	116%	ı	12%	0	3%	•	•	•		85%
O'Connor	100%	114%	•	%19	•	14%		•			18%
Rehnquist	100%	101%	20%	11%	•	ı	1	1	1	1	%68
Stevens	100%		1	44%	1	1	ı	1	1	ı	%99
Breyer	100%		1	,	1	•	100%	,	1	1	1
Ginsburg	100%		ı	1	•	1	100%	1	1	1	1
Souter	85%		29%	21%	•	20%	1	3	1	ı	ı

				Fron "Liberal	tier Anal Frontier"	Frontier Analysis Table 4 "Liberal Frontier"-Unconstrained	le 4 rained				
Justice	%	%				Cat	Category Weights	hts	·		
	of Frontier	Super- Eff.									
			Civil/	Civil/	Crim/	Crim./	1st Am.	Equal	Stat. Civ.	Juris.	Fed'ism
			State	Federal	State	Federal		Protect.	T:		
Souter	100%	1000%		•			100%		,		
Stevens	100%	135%	1	•	100%	r	ı	t	•	•	•
Ginsburg	100%	117%	ı	42%	1	20%	ı	%8			
Thomas	100%	108%	1	100%	•	,		1	ı	ı	
Breyer	100%	108%	1	1	\$	1	ı	13%	87%		
Rehnquist	100%	107%	В	45%	B	1	ı	ı	ı	25%	ı
Kennedy	%86			42%	•			•	%8	20%	•
Scalia	%68		1	20%	,	20%	1	1	ı	ı	30%
O'Connor	%98		%89	•	•			,			35%









V. Category Analysis

Beginning last Term, we began to analyze the effectiveness of this Study's categories in measuring liberal and conservative tendencies and trends. As might be expected, some categories turn out to be better indicators than others of the Court's collective and individual predilections with respect to these metrics.

Some categories, although tending to divide the Court into liberal/conservative blocs, may "change polarity," depending on the specific issues presented. For example, last Term's First Amendment scores placed Justices Scalia and Thomas at the top—a liberal position under this Study's definitions, and a position not commonly occupied by these particular Justices. Conversely, Justice Breyer held the bottom spot last Term. Other categories tend to be implicated in very few cases. The small sample results in highly volatile score movements from Term to Term because a single case may account for many percentage points. This point is dramatically illustrated this Term in the First Amendment category. Because only one First Amendment issue was decided, each Justice scored either 0% or 100% in the category!

In order to determine which categories best differentiate between more liberal and more conservative Justices, we have applied factor analysis. By applying this method, we have determined that a primary factor may be extracted from the Study's categories that accounts for over 37% of the variance revealed by the data on Tables 1 through 9. We interpret this factor as liberal/conservative bias because that is what this Study purports to measure. The categories currently load onto this primary factor as follows:

^{115.} For more information regarding factor analysis, see Appendix B.

^{116.} We employed a QMAX rotation to achieve this result.

Category	Factor 1
Criminal/State Party	0.864
Statutory Civil Rights	0.782
Civil/State Party	0.744
Jurisdiction	0.727
Criminal/Federal Party	0.673
Federalism	0.589
First Amendment	0.302
Civil/Federal Party	0.098
Equal Protection	0.009
Variance	3.341
% Variance	0.371

According to this ranking, the Criminal/State Party category appears to be our best differentiator of liberal/conservative leanings, while Equal Protection is our poorest. A look at the data seems to confirm this result.

Equal Protection Claims are relatively rare and produce volatile results. Civil/Federal Party case scores, moreover, tend to switch poles as executive administrations change. Liberal administrations will bring different types of cases before the Court than will conservative administrations and will garner the support of different Justices. For example, Chief Justice Rehnquist's average score was 74% under Republican administrations, but has fallen to 61% since President Clinton took office. On the other hand, Justice Stevens averaged 48% under the Republicans and 59% under President Clinton. First Amendment cases also tend toward pole swapping. For example, if last Term's free speech issues had concerned flag burning rather than abortion clinic demonstrations and government regulation, the scores might have been nearly reversed.

Category analysis, in short, suggests that the most reliable indicator of actual ideology is the data collected on Table 3 (criminal/state party), with Tables 7 (statutory civil rights), 1 (state civil actions), 8 (jurisdiction), and 4 (Federal criminal cases) providing the next most reliable data. Tables 9 (federalism), 5 (First Amendment), 2 (federal civil actions) and 6 (equal protection) provide the least reliable information.

^{117.} See supra Chart 6.

^{118.} See supra Data Table 2.

^{119.} See also discussion of Table 2, above.

^{120.} See supra 1996 Study, note 1 at 91.

VI. Frontier Analysis

Attempting to quantify the magnitude of a Justice's liberal or conservative tendencies and to identify trends in such tendencies over time is challenging for a variety of reasons. One challenge already discussed is that of choosing appropriate tests and assessing their validity. Another is dealing with inconsistency in the nature of cases appealed to the Court from one Term to the next and the Court's selection of which questions it will decide. With varying parameters such as these, is there any meaningful way to quantify, analyze and compare the Justices' inclinations? One potentially useful method is frontier analysis.¹²¹

Frontier analysis focuses on the Justices' relative scores rather than their absolute scores. Boundaries or "frontiers" are defined by the highest and lowest scores in each category and each combination of categories. Each Justice is then evaluated relative to the established frontier. Moreover, by adjusting the relative weights allocated to each category, the frontier can be adjusted to reflect each category's effectiveness as determined by factor analysis.

We present liberal and conservative frontier data for the Court in Frontier Analysis Tables 1-4 below. Two versions of each frontier are presented. In Tables 1 and 2 we constrain the weights applied to each category according to the factor analysis hierarchy described above. 122 In other words, each Justice is allowed to "choose" the weights that produce the highest frontier score for him or her, subject to the limitation that Statutory Civil Rights cannot receive more weight than Criminal/State, Civil/State cannot receive more weight than Statutory Civil Rights, and so forth. Tables 3 and 4 apply no weighting constraints at all, allowing each Justice to "choose" those weights that present him or her in the most conservative or liberal light possible. Each table lists a "% of Frontier" score for each Justice. Those with a score of 100% reach the frontier by employing the category weight distribution shown in the category columns. Scores less than 100% indicate that the most conservative/liberal score the Justice could obtain with optimal weighting places him or her the indicated percentage of the way toward the frontier. In some cases, an optimal combination of weights may even place a justice beyond the frontier. This condition is known as "superefficiency" and is noted in the charts when present.

^{121.} For more information regarding frontier analysis, see supra Appendix B.

^{122.} See supra note 20 and accompanying text.

Frontier Charts 1 and 2 show the constrained scores of each Justice over the course of this Study in graphical form. Near the bottom of each chart is an indication of new Justices replacing outgoing Justices on the Court. Although former Justices' scores are not indicated, they contributed to frontier determination during Terms in which they sat on the Court.

Frontier Charts 3 and 4 show each Justice's range of frontier scores during the course of this Study. They are easier to read than the line graphs and give a clearer picture of the Justice's relative positions and score ranges overall. They do not, however, show any trend information.

The Charts reveal several interesting trends. Frontier Chart 1 shows Justice Thomas making a superefficient conservative "splash" during his first Term on the Court, then settling in around the frontier thereafter. Frontier Chart 2 shows clear and growing domination of the liberal frontier by Justice Stevens. This chart also provides evidence that Justice Souter's reputation as the "Stealth Justice" is probably justified. Beginning his tenure on the Court in 1990 with a liberal frontier score of just 53%, Justice Souter has subsequently registered scores of 74%, 79%, 88%, 96%, and 100% prior to backing off to 85% in the 1997 Term. His 1998 Term score indicates 147% superefficiency! 124

Frontier Chart 3 shows that Chief Justice Rehnquist and Justices Kennedy, Scalia, O'Connor, and Thomas have all reached the conservative frontier at some point during the Study. In fact, the Chief Justice never dropped below it until this Term, i.e., he has demonstrated conservative super-efficiency each Term until this one. Frontier Chart 4 clearly displays Justice Stevens' super-efficient liberal tendencies. In fact, he so dominates the liberal frontier that only two other Justices, Breyer and Souter have managed to touch the frontier. Justice Ginsburg is alone in reaching neither the liberal nor the conservative frontiers during her five Terms on the Court.

^{123.} See, e.g., Dick Lehr, A Step Toward the Left: Souter's Surprise Shift May Alter the Court, BOSTON GLOBE, July 1, 1993, at A11. The article stated: "In his first term, he wrote so little he was nicknamed the 'stealth justice.' Last term, he was lumped into a trio of moderate conservatives. Now, in the term just ended, Supreme Court Justice David Souter is the surprise of most high-court prognosticators for displaying increasingly liberal tendencies." Id.

^{124.} See infra Frontier Analysis, Table 2. This superefficiency is due in large part to Justice Souter's lone vote in favor of the only First Amendment issue decided by the Court this Term.

VII. Conclusion

The 1997 Term exhibits the Court's increasing inclination to vote liberally on ideologically divided issues. Strengthening this conclusion is the Court's almost across-the-board liberal shift in split cases (cases where there is at least one dissenter). Furthermore, in swing-vote cases, which is perhaps the most reliable indicator of the Court's posture—with Justice Kennedy playing the key role—the Court predominately favored liberal outcomes. With the possible exception of the State Criminal Cases category, this Term's voting behavior could be considered a continuation of last year's consolidation of the Court's conservatism with the Court conservatives voting much less conservatively and the liberal Justices maintaining their positions. With this tension as a backdrop, the Court experienced a resurgence of the once-dormant jurisdiction and federalism issues. The liberal outcomes prevailing in both these categories further evidences the Court's growing liberal stance and fading conservative allegiance. With last Term's apparent ripeness for a conservative-court change, 125 this Term is yet another indicator that perhaps this shift towards a primarily liberal balance-of-power is already well underway.

APPENDIX A

1. The Universe of Cases

The only cases included in the database are those 1997 Term cases decided by full opinion. Decisions on motions have been excluded even if accompanied by an opinion. Cases handled by summary disposition are included only if they are accompanied by a full opinion of the Court and not if the only opinion is a dissent. Cases decided by a four-four vote resulting in affirmance without written opinion have been excluded. Both signed and unsigned per curium opinions are considered full opinions if they set forth reasons in a more than perfunctory manner. Cases not fitting within any of these categories are not included in the database for any of the tables.

2. Cases Classified as Civil or Criminal

The classification of cases as civil or criminal follows commonly understood definitions. Generally, the nature of the case is clearly identified in the opinion. Only occasionally does a case pose a problem of classification. No cases in the 1997 Term raised such a question.

3. Cases Classified by Nature of the Parties-Data Tables 1 through 4

Cases are included on Data Tables 1 through 4 only if governmental and private entities appear as opposing parties. This is necessarily true of criminal cases. Civil cases are excluded from these tables if they do not satisfy this criterion. The governmental entity might be the United States government or one of its agencies or officials, or, with respect to a state government, one of its political subdivisions. A suit against a government official in a personal capacity is included if that official is represented by government attorneys, or if the interests of the government are otherwise clearly implicated. In instances of multiple parties, a civil case is excluded if governmental entities appear on both sides of the controversy. If both a state and a federal entity are parties to the same suit on the same side with only private parties on the other, the case is included on Data Tables 1 and 2. A case is included more than once on the same table if it raises two or more distinct issues affecting the outcome of the case and the issues are resolved by different voting alignments.

4. Classification by Nature of the Issue–Data Tables 5 through 9

A case is included in each category of Data Tables 5 through 9 for which it raises a relevant issue that is addressed by written opinion. One case may thus be included on two or more tables. A case is also included more than once on the same table if it raises two or more distinct issues in the category affecting the disposition of the case and the issues are resolved by different voting alignments. A case is not included on a table if an issue raised by one of the litigants is not addressed in any opinion.

Identification of First Amendment and equal protection issues poses no special problem since the nature of each claim is expressly identified in the opinion. Issues of freedom of speech, press, association, and free exercise of religion are included. However, Establishment Clause cases are excluded since one party's claim of religious establishment is often made against another party's claim of free exercise or some other individual right, thus blurring the issue of individual rights.

Statutory civil rights included on Data Table 7 are limited to those invoking the Civil Rights Act of 1964, the Voting Rights Act of 1965, and other civil rights statutes expressly barring discrimination on the basis of race, color, national origin, sex, religion, age, or physical handicap. Actions brought under 42 U.S.C. § 1983 are include if the substantive right asserted is based on a federal statute, or if the issue involves the application of 42 U.S.C. § 1983 to the case at hand. However, 42 U.S.C. § 1983 actions are excluded if the substantive right asserted is based on the United States Constitution and the issue relates to that constitutional right. The purpose of this exclusion is to preserve the distinction between constitutional and non-constitutional claims.

For Data Table 8, jurisdictional questions are defined to include not only jurisdiction per se, but also standing, mootness, ripeness, abstention, equitable discretion, and justiciability. Jurisdictional questions are excluded if neither party challenges jurisdiction and no member of the Court dissents on the question, even though the Court may comment on its jurisdiction.

Federalism cases on Data Table 9 are limited to those cases in which there were issues raised by conflicting actions of federal and state or local governments. Common examples of these issues are preemption, intergovernmental immunities, application of the Tenth and Eleventh Amendments as a limit on federal government action, and federal court interference with state court activities (other than

review of state court decisions). Issues of "horizontal" federalism or interstate relationships, such as those raised by the dormant Commerce Clause or the Privileges and Immunities Clause, are excluded from the table.

5. The Swing Vote Cases

Data Table 10 includes all cases where the outcome turns on a single vote. This category also includes five-four decisions and four-three decisions, if any, as well as five-three and four-two decisions that reverse a lower court decision. Affirmances by a vote of five-three or four-two are not included because a shift of one vote from the majority to the minority position would still result in affirmance by a tie vote. A case is included more than once in the table if it raises two or more distinct issues affecting the disposition of the case and the issues are resolved by different voting alignments.

APPENDIX B Study Methodology

This Study seeks to quantify three characteristics of Supreme Court voting behavior: voting trends, mean voting percentages, and relationships among the Justices' voting patterns. We analyze these characteristics both for the Court as a whole and for individual Justices. The following sections explain the statistical methods employed in this Study and how test results should be interpreted.

A. Scores

Each score in this Study is simply the percentage of times a Justice voted in favor of the party or claim specified by the category. Some categories contain fewer samples than others, resulting in coarser score increments.

B. Predictive Modeling

Data in this project were fitted to an Auto Regressive Integrated Moving Average (ARIMA) forecasting model.¹²⁷ This model is useful in circumstances where, as in this Study, a single variable (a Justice's score) is to be forecast based only on its present and prior values with no other explanatory variables. ARIMA modeling is most easily explained by starting in the middle of the acronym:

Integrated: This refers to a differencing process which operates in a manner similar to differentiation of a continuous function in calculus. The goal is simply to remove trend from the time series data by subtracting each score in the time series from the next score in the series. The resulting differences form a new time series. This operation may be repeated successively until a trendless or "stationary" series results. Our model employs only one differencing operation.

Auto-Regression: Once the series has been made stationary, an auto-regressive parameter may be determined. This parameter seeks to relate each data point in the stationary series to the data point immediately preceding it through multiplication. That is:

^{126.} Our ability to analyze newer Justices' voting patterns may be restricted or precluded in some instances due to insufficient data.

^{127.} ARIMA computer modeling was accomplished using MINITAB® statistical software with p = 1, d = 1, and q = 1. For more information regarding the ARIMA (p,d,q) model, see Peter Kennedy, A Guide to Econometrics 248-49 (1992).

^{128.} Many statistical models employ more than one autoregressive parameter due to various properties of the data series. Our data series produces the most the most accurate forecasts with single-parameter (first order) AR and MA models.

$$X_t = AX_{t-1}$$

where X_t is the value of the data series at point t, A is the autoregressive parameter, and X_{t-1} is the value of the data series point immediately preceding X_t .

Because we are dealing with a *series* of data points, however, a single parameter will almost never precisely produce the relationship just described for all data point pairs. Some error is inevitable. We therefore seek to determine that parameter which produces the least total error when applied to the entire series.¹²⁹

Moving Average: A second parameter is determined that relates the value of each series element X_t to the error between the estimated value and the actual value of the previous element X_{t-1} . That is:

$$X_t = -Bx_{t-1}$$

where -B is the Moving Average parameter. The value of this parameter is also optimized to minimize its total error when applied to the series.

Synthesis: The previous operations are combined into the equation:

$$X_t = Ax_{t-1} - Bx_{t-1} + E_t$$

where E_t represents the residual error remaining between the calculated and actual values of X_t . This final equation is used to predict the score for the following Term.

C. Mean Testing

We use a "student's t test"¹³¹ to determine whether this Term's score (X_2) , departs in a statistically significant manner from the mean of all previous Terms' scores (X_I) . Essentially, we treat these two numbers as the means of two independent samples drawn from the universe of all scores in the category.¹³² We hypothesize that X_I is also the true mean of the population μ , and we set up this hypothesis

^{129.} This is accomplished by applying least squares estimation, i.e., the parameter is chosen such that the sum of the squared errors is minimized.

^{130.} Although this operation may not seem as intuitive as the autoregression operation, it may help to think of the error terms as "'shocks' that initially set the process in motion and continue to keep it in motion thereafter." John C. Hoff, A Practical Guide to Box-Jenkins Forecasting 50 (1983).

^{131.} For a practical perspective on this procedure, see DAVID S. MOORE & GEORGE P. McCabe, Introduction to the Practice of Statistics 500-18 (1993). See also Craig and Hogg, supra note 33.

^{132.} This approach introduces potential bias problems due to non-random sampling, small samples, and dissimilar sample standard deviations. Nevertheless, we use the test to impose some measure of discipline in analyzing the available data.

(the "null" hypothesis) and its corresponding alternative hypothesis as follows:

 H_o : $\mu = X_1$ The "null" hypothesis, i.e., X_2 does not significantly shift μ from its previous value on the real number line. Therefore, the two samples are statistically equivalent.

 H_a : μ · X_1 The alternative hypothesis, i.e., X_2 significantly shifts μ from its previous value on the real number line. Therefore, the two samples are not statistically equivalent.

We then set out to prove the alternative hypothesis, within a certain confidence interval, ¹³³ by rejecting the null hypothesis. ¹³⁴ This is accomplished by calculating the following statistic:

 $t = \{ OVERLINE \times SUB 2 - mu \} OVER \{s/SQRT n\}$

The result of this equation (t) is compared to the entry on a t-distribution table corresponding to the confidence interval desired (") and the appropriate number of degrees of freedom (n-k).¹³⁵ If the absolute value of t is greater than the table entry, H_o is rejected and we say that the Justice has shown a statistically significant change in voting behavior this Term.

D. Correlation

Relationships between two Justices' voting records may be mapped over a two-dimensional Cartesian plane as in Figures 1 and 2. Figure 1 shows a high degree of positive correlation (R²=0.7921) between the voting percentages of the Chief Justice and Justice Scalia for the Equal Protection category. The points all fall close to an upward sloping line. On the other hand, Figure 2 shows that the voting percentages of the Chief Justice and Justice Stevens show only a very weak, negative correlation (R²=0.0473). The points are widely scattered about a downward sloping line. Statistically significant correlations between and among Justices' Term-to-Term voting pattens are shown in Regression Tables 1-10. The first number in each pair is the Pearson correlation coefficient. The second number is an R² statis-

^{133.} We have selected a confidence interval of 95%. Because this is a two-tailed test OVERLINE \times SUB 2 may shift μ in either a positive or negative direction), " = .025.

^{134.} A full description of the logic behind this seemingly convoluted procedure is beyond the scope of this article. However, its purpose is to control Type I (or alpha) error. For a complete explanation, see Moore and McCabe, supra note 131.

^{135.} k = the number of parameters being tested; here, μ is the only hypothesized parameter, so k = 1.

tic.¹³⁶ Notice that Justices, such as Justice Breyer, for whom we have few data points, are especially likely to show high Pearson coefficients, but low R² statistics. The latter is a more reliable measure of the actual level of correlation.

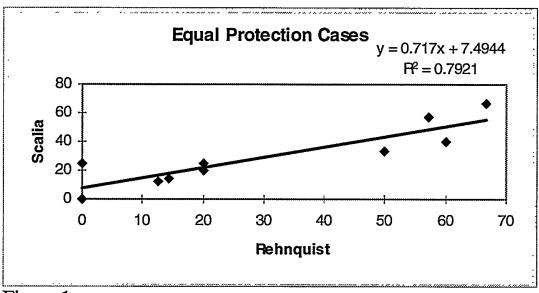


Figure 1

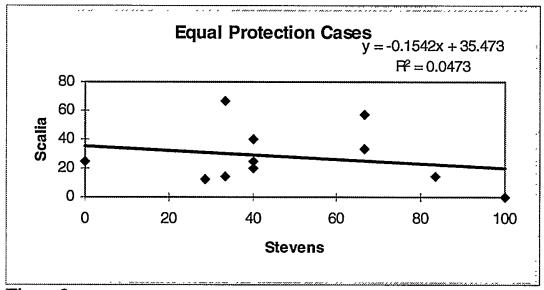


Figure2

^{136.} The r^2 statistic is an estimate of ρ^2 , the true measure of correlation between the dependant variable and its independent counterpart(s). The "adjusted" r^2 value in the tables is a result of the computer's attempts to filter out any bias in the original r^2 result.

The correlation measured in this case is in the Term-to-Term movement of Justices' scores. A high correlation between two Justices does not mean that they necessarily vote together often. It simply means that their scores tend to move up and down together from one Term to another. Also note that correlation in no way implies causation.

E. Factor Analysis

Factor analysis has long been used by psychologists who attempt to identify characteristics of personality or intelligence by using batteries of tests. Their challenge has been to develop tests that validly measure the characteristics of interest. This Study similarly attempts to measure the Justices' liberal and conservative leanings by "testing" their disposition of certain types of cases.

We performed a factor analysis of the Study categories using Minitab software from Minitab, Inc. The factor loadings presented were obtained by applying a QMAX rotation to the data. A full description of the theory and mathematics underlying factor analysis is beyond the scope of this appendix, but several books on the subject provide reasonably simple explanations of this complex process.¹³⁷

F. Frontier Analysis

Frontier analysis can probably best be described with an example. Suppose four individuals are competing for the title of "world's greatest athlete." Their scores in two events are listed in the following table:

	Croquet	Marbles
Alan	9	2
Betty	7	7
Chuck	4	5
Debbie	3	8

Alan's agent would argue that the title should go to the best croquet player, while Debbie's agent would argue that the best marbles player should win. Betty's agent would argue that each sport should receive equal weight. To see why, weigh each of the scores above by 50% and add each athlete's resulting scores together. Alan would score $(9 \times 0.5) + (2 \times 0.5) = 5.5$. Betty would score $(7 \times 0.5) + (7 \times 0.5) = 7$. Chuck's score would be 4.5, and Debbie's score would be 5.5. The situation is presented graphically in the following figure:

^{137.} See generally Dennis Child, The Essentials of Factor Analysis (2d ed. 1990).

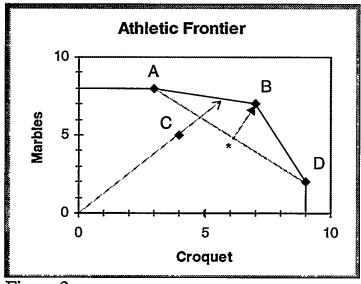


Figure 3

A, B, C, and D represent the athletes. The solid line connecting A, B, and D represents the athletic frontier, i.e., the boundary beyond which no athlete has performed regardless of the relative weights assigned to marbles and croquet. A, B, and D are located at 100% of the frontier. Moreover, B can be said to be super-efficient to the extent it lies beyond the line AD connecting the two points adjacent to it on the frontier A and D are also super-efficient to the extent they lie beyond lines (not shown) connecting B with the points at which the frontier meets each axis. C falls short of the frontier regardless of the weights assigned to marbles and croquet. However, an optimal set of weights may be selected such that C "looks his best," i.e., he comes closest to reaching the frontier.

The same concept can be applied to the Court to determine which Justice is "most conservative" or "most liberal." However, instead of two dimensions (croquet and marbles), the Court analysis includes nine dimensions (all Study categories except Swing Votes). Although human minds have difficulty envisioning nine dimensions, computers can handle the required calculations with ease. We performed our analysis using Microsoft Excel's solver feature. Although the formulas and procedures involved are straightforward, a complete description of them is beyond the scope of this appendix. 138

^{138.} For more information on frontier analysis, see Donald L. Adolphson, Manager's Toolkit: Managerial Spreadsheet Analysis (1998).