Testing for Structural Change in Legal Doctrine: An Empirical Look at the Plaintiff's Decision to Litigate Employment Disputes a Decade After the Civil Rights Act of 1991

Gregory Todd Jones

Follow this and additional works at: http://readingroom.law.gsu.edu/gsulr
Part of the Law Commons

Recommended Citation
Available at: http://readingroom.law.gsu.edu/gsulr/vol18/iss4/3
TESTING FOR STRUCTURAL CHANGE IN LEGAL DOCTRINE: AN EMPIRICAL LOOK AT THE PLAINTIFF'S DECISION TO LITIGATE EMPLOYMENT DISPUTES A DECADE AFTER THE CIVIL RIGHTS ACT OF 1991

INTRODUCTION

At common law, the employment-at-will doctrine was the touchstone for analyzing the relationship between an employer and employee. According to this doctrine, either the employer or the employee could terminate the employment relationship at any time, for any reason, or for no reason at all, if no contract expressly dictated otherwise. Federal antidiscrimination legislation, including Title VII of the Civil Rights Act of 1964, the Age Discrimination in Employment Act of 1973, and the Americans with Disabilities Act of 1990, can be viewed as exceptions to the common law rule.

The Civil Rights Act of 1991 (CRA) extends the reach of federal employment discrimination legislation in the following three ways: First, the CRA which amended Title VII of the Civil Rights Act of 1964, the Age Discrimination in Employment Act of 1973, the Americans with Disabilities Act of 1990, and other federal legislation broadened the scope of the law in ways that will be summarized later in this Note. Second, the CRA provided for both

2. See, e.g., Hablas v. Armour & Co., 270 F.2d 71, 78 (8th Cir. 1959) (“Under Illinois law employment contracts not expressly made for a fixed period are for employment at will, and may be terminated by either party without cause.”).
punitive and non-pecuniary compensatory damages, and gave plaintiffs the right to a jury trial when seeking monetary damages.  

Finally, the CRA overturned seven United States Supreme Court decisions that had previously narrowed the scope of federal employment discrimination legislation.

Individual action, not governmental action, is the primary means of vindicating rights created under Title VII and other federal antidiscrimination legislation. The Supreme Court has recognized the importance of this distinction:

Congress gave private individuals a significant role in the enforcement process of Title VII. Individual grievants usually initiate the Commission's investigatory and conciliatory procedures. And although the 1972 amendment to Title VII empowers the Commission to bring its own actions, the private right of action remains an essential means of obtaining judicial enforcement of Title VII. In such cases, the private litigant not only redresses his own injury but also vindicates the important congressional policy against discriminatory employment practices.

Therefore, an examination of the legislation's effect on the plaintiff's decision in favor of private enforcement—that is, the plaintiff's selection of an employment dispute for litigation—is an


important part of any study of employment discrimination law and its enforcement.\textsuperscript{15} The following model of risky decision-making may provide a helpful framework through which to analyze a plaintiff’s decision to escalate an employment dispute to litigation.\textsuperscript{16} The plaintiff maintains some subjective estimation that the litigation will be successful (represented by $P$ in the following formula). The plaintiff also estimates the benefits that might come from the litigation in the form of damage awards and injunctive relief (represented by $B$ in the following formula). And, of course, there are costs associated with

\begin{align*}
E(x) &= .5(1) + .5(-1) = 0
\end{align*}

Theoretically then, the gambler should be indifferent as to taking this bet or not betting at all. However, should the gambler’s estimate of the probabilities change—for example, if the gambler estimates that it is three times more likely that the coin will land on tails rather than heads—then the new expected value of the bet would be

\begin{align*}
E(x) &= .25(1) + .75(-1) = -.50
\end{align*}

and a reasonable person would therefore prefer not to bet because he would rather see no change in his finances than lose fifty cents. Further, suppose that the stakes of the bet change, allowing the gambler to win four dollars if the coin lands on heads but lose only a dollar if the coin lands on tails. Using the same biased coin, the expected value of this bet would be

\begin{align*}
E(x) &= .25(4) + .75(-1) = .25
\end{align*}

and a reasonable person would probably be willing to bet again in that scenario. Lawyers and law students will remember, likely with some trepidation, that this expected value criteria forms the basis of the famous Hand formula for tort liability set forth by Judge Learned Hand in United States v. Carroll Towing Co., 159 F.2d 169 (2d Cir. 1947).
the litigation (represented by C in the following formula). In simplified terms, therefore, the expected value \( E(x) \) of the plaintiff’s decision may be represented as:

\[
E(x) = P(B) + (1-P)(-C)
\]

The primary motivation for the hypotheses tested in this Note is Peter Siegelman’s 1990 assertion that changes in legal doctrine would not affect the filing rate or the outcome of litigated cases. In fairness, Siegelman made his observation a year before the CRA—the dramatic doctrinal change underlying the rationale for the model proposed and tested here.

This Note uses outcome data from federal employment discrimination cases filed between 1970 and 1995 to test this proposed model of plaintiff decision-making and empirically examines how the doctrinal change engendered by the CRA has affected this decision-making contrary to Siegelman’s assertion. In doing so, this Note is at once descriptive, normative, and prescriptive. Descriptively, the Note aggregates large volumes of outcome data and provides tabular and graphical summaries of relevant components. Normatively, it presents theoretical models.

---

17. While the general American rule is that the parties to a lawsuit are responsible for their own attorneys' fees, Title VII of the Civil Rights Act of 1964 and other federal employment discrimination legislation create a new rule. See Cox, supra note 1, at 24-50 to 24-60. "[T]he court, in its discretion, may allow the prevailing party, other than the [Equal Employment Opportunity Commission] or the United States, a reasonable attorney’s fee . . . as part of the costs, and the Commission and the United States shall be liable for costs the same as a private person." Id. at 24-51 (quoting § 706(d) of Title VII, 42 U.S.C. § 2000e-5(k) (2000)). Under the general American rule, the probability of winning does not affect the plaintiff’s expected costs in the proposed formula. However, under the Title VII rule, the plaintiff’s expected costs would change; therefore, for any given level of damages, the plaintiff needs a smaller probability of success in order to rationally decide in favor of litigation. See Peter Siegelman, The Influence of Macroeconomic Conditions on Plaintiff Win Rates in Unpublished Federal Employment Discrimination Cases 8 n.14 (1990) (unpublished manuscript, on file with the Georgia State University Law Review) [hereinafter Siegelman, Macroeconomic Conditions].

18. See infra note 89 and accompanying text.

19. For a distinction between a normative and a descriptive theory, see PETER GARDENFORS & NILS-ERIC SAIHLIN, DECISION, PROBABILITY, AND UTILITY 5 (1988). "A normative theory gives rules for what a rational decision maker should do in various situations. A descriptive theory aims at describing how people in fact (rationally or not) make decisions in different situations." Id. A prescriptive theory makes suggestions for change.
suggesting principles that should guide rational decision-making. Prescriptively, this Note examines deviations from these models following the CRA’s enactment and describes policy implications for plaintiffs, defendants, legal representatives for both sides, and legislative bodies that will evaluate the impact of the current law and shape the future of federal antidiscrimination legislation.

Part I provides an historical overview of the legislative and judicial responses to employment discrimination and describes the development of the law in the following three distinct categories of cases: individual disparate treatment, systemic disparate treatment, and systemic disparate impact discrimination. In each category, the Note suggests how the CRA may have altered case outcomes. Part II briefly reviews existing literature on the selection of disputes for litigation. Part III describes outcome data gathered from 210,687 employment discrimination cases filed in federal court between 1970 and 1995, as well as unemployment data covering the same period. Part IV discusses the statistical methods applied to the outcome data to isolate trends in federal employment discrimination litigation and to validate the effect that the CRA may have had upon these trends. Part V summarizes the results of applying these statistical methods to test three hypotheses. The Note’s primary hypothesis is that plaintiffs’ decisions to litigate employment discrimination disputes have changed in a statistically significant way as a result of the doctrinal shift embodied in the CRA. The second hypothesis is that where the defendant has more to lose in a lawsuit than plaintiffs have to gain, and where there is increased uncertainty as to the outcome, more lawsuits will be filed, defendants are more likely to win, and settlements increase overall. The third hypothesis is that the dramatic increase in the lawsuit filings can be explained by the overly litigious nature of American society. While the results of this study offer support for the first two hypotheses, the third is not supported. Finally, the Note concludes that the CRA has significantly altered the nature of plaintiff decision-making in this arena, and describes some policy implications of these structural changes, including the
increased burden on the federal civil caseload and the concomitant expenses.

I. HISTORY OF EMPLOYMENT DISCRIMINATION LAW

A. Overview

Title VII of the 1964 Civil Rights Act broadly prohibits discrimination in employment. According to the Act, it is “an unlawful employment practice for an employer . . . to fail or refuse to hire or to discharge any individual, or otherwise to discriminate against any individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual’s race, color, religion, sex, or national origin.”

The Age Discrimination in Employment Act of 1973 (ADEA) is similar in structure to Title VII, but prohibits only age discrimination in employment, protecting individuals forty years of age or older. The Americans with Disabilities Act of 1990 (ADA) prohibits employers from discriminating against any “qualified individual with a disability.”

20. See John J. Donohue III & Peter Siegelman, The Changing Nature of Employment Discrimination Litigation, 43 Stan. L. Rev. 983, 983-84 (1991). “[T]he volume of federal employment discrimination litigation has grown spectacularly, many times faster than the overall federal civil caseload. Indeed, the growth has been so rapid as to raise concern that employment discrimination cases now impose a significant burden on federal judges.” Id. (citing FEDERAL COURTS STUDY COMMITTEE, TENTATIVE RECOMMENDATIONS FOR PUBLIC COMMENT 49-50 (1989)).

21. See Siegelman, Economic Analysis, supra note 13, at 3 n.5.

For example, the EEOC’s budget in FY 1987 was $169 million; the Commission has spent over $1.8 billion (in constant dollars of 1980) since its inception in 1966 [through 1991] . . . . If the average employment discrimination suit cost all parties, including administrative costs, roughly $9,400 in 1980 dollars . . . then the cost of the federal court suits is an additional $1 billion in 1980 dollars.

Id. (citations omitted).


23. Id. § 2000e-2(a), (a)(1).


25. See id.


27. Id.
B. Individual Disparate Treatment Discrimination

In *International Brotherhood of Teamsters v. United States*, the Court described individual disparate treatment, which is the most frequently litigated form of employment discrimination. The Court emphasized that individual disparate treatment discrimination is *intentional* discrimination. In other words, "[t]he employer simply treats some people less favorably than others because of their race, color, religion, sex, or national origin. Proof of discriminatory motive is critical, although it can in some situations be inferred from the mere fact of differences in treatment." A plaintiff can prove individual disparate treatment in the following two ways.

1. Direct Evidence or Mixed Motive Approach

*Price Waterhouse v. Hopkins* established one method by which a plaintiff can establish a prima facie case of individual disparate treatment discrimination. "That approach is triggered by the plaintiff’s introduction of *direct evidence*, that is, evidence that proves the employer’s intent to discriminate without the need to draw any inferences or at least evidence directly connected to the decision the plaintiff challenges." The CRA statutorily overrules the "substantial factor" test employed in *Price Waterhouse*, and adopts

---

30. *See Cox, supra* note 1, at 7-6; *see also* Hazen Paper Co. v. Biggs, 507 U.S. 604 (1993). In a disparate treatment case, liability depends on whether the protected trait ... actually motivated the employer’s decision. The employer may have relied upon a formal, facially discriminatory policy requiring adverse treatment of employees with that trait. Or the employer may have been motivated by the protected trait on an ad hoc, informal basis. Whatever the employer’s decisionmaking process, a disparate treatment claim cannot succeed unless the employee’s protected trait actually played a role in that process and had a determinative influence on the outcome.

507 U.S. at 610 (citations omitted).
31. 431 U.S. at 335 n.15.
32. 490 U.S. 228 (1989).
33. *Id.* at 259.
34. *Zimmer, supra* note 29, at 9; *see also* *Price Waterhouse*, 490 U.S. at 259-60.
the more plaintiff-friendly "motivating factor" test, stating that:
"[A]n unlawful employment practice is established when the
complaining party demonstrates that race, color, religion, sex, or
national origin was a motivating factor for any employment practice,
even though other factors also motivated the practice." However,
when an employer can establish that it "would have taken the same
action in the absence of the impermissible motivating factor," the
plaintiff is limited to declaratory or injunctive relief.

2. Circumstantial Evidence or Pretext Approach

Absent the direct evidence required by Price Waterhouse, the
plaintiff must rely on the "pretext" method of proof established in
liability under this approach by introducing circumstantial evidence
upon which a factfinder can draw an inference of discrimination."

C. Systemic Disparate Treatment Discrimination

Systemic disparate treatment describes far-reaching claims of
intentional discrimination that stem from an employer's formal
policies or general practices. Offering a valid business justification
is one available defense to a charge of systemic disparate treatment.
Title VII states in pertinent part:

It shall not be an unlawful employment practice for an employer
to hire and employ employees . . . on the basis of his religion,
sex, or national origin in those certain instances where religion,
sex, or national origin is a bona fide occupational qualification reasonably necessary to the normal operation of that particular business or enterprise.43

However, the CRA eliminated the business necessity defense for systemic disparate treatment discrimination,44 asserting that: “A demonstration that an employment practice is required by business necessity may not be used as a defense against a claim of intentional discrimination under this subchapter.”45

D. Systemic Disparate Impact Discrimination

Unless justified by business necessity, a defense that is still available for systemic disparate impact discrimination, employment practices that burden a protected class of employees are unlawful even if the employer did not intend to discriminate.46 The Court has described disparate impact discrimination as “involv[ing] employment practices that are facially neutral in their treatment of different groups but that in fact fall more harshly on one group than another and cannot be justified by business necessity. Proof of discriminatory motive . . . is not required under a disparate-impact theory.”47 The CRA amended Title VII so that a prima facie case of disparate impact is established if “a complaining party demonstrates that a respondent uses a particular employment practice that causes a disparate impact on the basis of race, color, religion, sex, or national origin,”48 codifying the theory of systemic disparate impact discrimination originally established in 1971 by Griggs v. Duke Power Co.49

43. Id.
45. Id.
Further, the CRA overruled the Court’s rejection of bottom line statistics in *Wards Cove Packing Co. v. Antonio*,\(^50\) and in doing so created an exception that allows the plaintiff to establish a prima facie case through the use of aggregate statistics in those cases where the “elements of a respondent’s decisionmaking process are not capable of separation for analysis.”\(^51\) In such cases, “the decision making process may be analyzed as one employment practice.”\(^52\)

Finally, the CRA returned to a more restrictive interpretation of the affirmative defense of business necessity.\(^53\) Under the CRA, the defendant must prove “that the challenged practice is job related for the position in question and consistent with business necessity.”\(^54\)

**E. Summary of Suggested Structural Changes Resulting from the Civil Rights Act of 1991**

1. **Individual Disparate Treatment Discrimination**

- Adoption of the “motivating factor” test for discriminatory employment practices in lieu of the *Price Waterhouse* “substantial factor” test\(^55\) will theoretically make it easier for a plaintiff to make his case, therefore increasing the plaintiff’s

---

52. *Id.*
54. *Id.* This change is very important for the following three reasons: First, it replaces the *Wards Cove* language about reasoned review of the employer’s justification for the challenged practice. Congress rejected the Court’s view that the practice need not be “essential” or “indispensable” and returned to the notion of business necessity. Second, the plain meaning of the section makes it clear that the burden on the employer on these issues is one of persuasion and not, as the Court would have had it in *Wards Cove*, just of production. Third, the plain meaning of the section requires the employer to demonstrate both that the challenged practice is (1) job related for the position involved and (2) justified by business necessity. Both terms originally come from *Griggs v. Duke Power Co.*, and the Court’s usage in that case suggests that job relatedness is a narrower, more difficult, justification than business necessity.
55. *See* Title VII, § 703(m), 42 U.S.C. § 2000e(k); *see also* supra Part I.B.1.
estimate of the likelihood of success—represented by \( P \) in the model to be tested in this Note.\(^{56}\)

- Limitation of remedies when the employer can show that it would have taken the same action without the influence of the motivating factor\(^{57}\) will limit possible recoveries, but will not eliminate possible liability under the employer’s affirmative defense. Thus, \( B \),\(^{58}\) the plaintiff’s estimate of the benefits that could come from litigation, is likely to increase in this theoretical model.

2. **Systemic Disparate Treatment Discrimination**

- Elimination of Business Necessity Defense: Elimination of business necessity as a defense for systemic disparate treatment.\(^{59}\) This change makes an employer’s defense more difficult and therefore increases \( P \),\(^{60}\) the plaintiff’s estimate of the likelihood of success.

3. **Systemic Disparate Impact Discrimination**

- The CRA’s codification of disparate impact allows a plaintiff to establish a prima facie case without proof of discriminatory motive.\(^{61}\) This change arguably reduces the plaintiff’s burden and thus increases \( P \),\(^{62}\) the plaintiff’s estimate of the likelihood of success.

- Allowing plaintiffs to present “bottom line” statistics in order

---

56. As described in the proposed expected value formula (“Proposed Model”) discussed in the Introduction, supra, \( P \) represents the plaintiff’s estimate of the likelihood of success.
58. See Proposed Model, supra Introduction.
60. See Proposed Model, supra Introduction.
62. See Proposed Model, supra Introduction.
to establish a prima facie case in certain situations may make it easier for a plaintiff to establish his case. If so, \((P)\), the plaintiff’s estimate of the likelihood of success, will likely increase.

- Theoretically, the fact that the CRA marked a return to a more restrictive interpretation of business necessity will make an employer’s defense more difficult, therefore increasing \((P)\), the plaintiff’s estimate of the likelihood of his own success.

4. Other Effects of the Civil Rights Act of 1991

- Providing for a jury trial when the plaintiff is seeking monetary damages may also theoretically increase \((P)\), the plaintiff’s estimate of the likelihood of success.

- In all likelihood, providing for punitive and non-pecuniary damages will increase \((B)\), the plaintiff’s estimate of benefits flowing from litigation.

---

64. See Proposed Model, supra Introduction.
66. See Proposed Model, supra Introduction.
67. See Litras, supra note 10.
68. See Proposed Model, supra Introduction.
69. See Litras, supra note 10.
70. See Proposed Model, supra Introduction.
TABLE 1
CHANGES ENGENDERED BY THE CRA AND PROJECTED CHANGES
to Parameters of Plaintiff Decision Making Model

<table>
<thead>
<tr>
<th>Change</th>
<th>Description</th>
<th>Likely Change in Model Parameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivating Factor</td>
<td>Employer held liable for even the slightest discriminatory motive.</td>
<td>Increase (P)</td>
</tr>
<tr>
<td>Limitation on Remedies</td>
<td>If employer can establish that the same action would have been taken absent the discriminatory motivating factor, limited to declaratory or injunctive relief.</td>
<td>Increase (B)</td>
</tr>
<tr>
<td>Elimination of Business Necessity Defense</td>
<td>Business necessity is not a defense against a claim of intentional discrimination.</td>
<td>Increase (P)</td>
</tr>
<tr>
<td>Codification of Disparate Impact</td>
<td>Easing of plaintiff's burden of proof in disparate impact cases.</td>
<td>Increase (P)</td>
</tr>
<tr>
<td>Bottom Line Exception</td>
<td>Allows for the use of bottom line statistics to establish a prima facie case.</td>
<td>Increase (P)</td>
</tr>
<tr>
<td>Return to Business Necessity</td>
<td>Requires employer to show that the alleged discriminatory practice “bears a demonstrable relationship to successful performance of the jobs for which it was used.”</td>
<td>Increase (P)</td>
</tr>
<tr>
<td>Availability of Jury Trial</td>
<td>Jury trials allowed in Title VII and ADA cases where damages are sought.</td>
<td>Increase (P)</td>
</tr>
<tr>
<td>Non-Pecuniary Compensatory &amp; Punitive Damages</td>
<td>Limited compensatory and punitive damages made available under Title VII and ADA.</td>
<td>Increase (B)</td>
</tr>
</tbody>
</table>

More details regarding each of these hypothesized effects on plaintiff decision-making may be found supra Section I.E.
II. THE DECISION TO ESCALATE A DISPUTE TO LITIGATION

A. Review of Litigation Literature

1. The Priest Klein Model

In a seminal paper written nearly twenty years ago, Professors George Priest and Benjamin Klein proposed that appellate cases, while appropriate for the study of doctrinal developments in the law, were not a random sample of legal disputes and therefore offered little insight into the influence that legal rules exert on social behavior. To clarify the differences between disputes that are settled and disputes that are litigated, Priest and Klein developed a rational model of the litigation-settlement decision, derived from earlier important contributions to the field. "The most important assumption of the model is that potential litigants form rational estimates of the likely decision. . . ." According to their model, "the determinants of settlement and litigation are solely economic, including the expected costs to parties of favorable or adverse decisions, the information that parties possess about the likelihood of success at trial, and the direct costs of litigation and settlement."
The theories embraced by the model proposed in this Note 76 rely heavily upon the foundation established by Priest and Klein as well as the later expansion of those theories by John Donohue and Peter Siegelman. 77

a. Predicting a Fifty Percent Win Rate When Plaintiff’s and Defendant’s Stakes Are Equal

Priest and Klein proposed a theory that when the parties to litigation have equal stakes, the plaintiff will enjoy a win rate of fifty percent “regardless of the substantive standard of law.” 78 This follows from the reasoning that cases with a clear winner will be settled in order to save the additional costs associated with litigation. 79 This leaves only cases that are close calls—so close, in fact, that the determination of these cases in litigation will result in win rates that will be nearly fifty-fifty for plaintiffs and defendants. 80 However, Priest and Klein acknowledge that other influences may affect these success rates and suggest that asymmetrical stakes will be the most likely explanation for rates that differ from fifty percent. 81

b. Asymmetrical Stakes Theory

According to Priest and Klein, as expectations diverge, such as when a defendant has a greater stake in the litigation than does the plaintiff, the decision-making process with regard to litigation and settlement changes. 82 “As a consequence, relatively more disputes with likely plaintiff verdicts will be settled and relatively more disputes with likely defendant verdicts will be litigated. Observing only litigated cases, defendant verdicts will be greater than 50

76. See supra Introduction.
77. See infra Part II.A.2.
78. See Priest & Klein, supra note 71, at 5.
79. See id. at 6-24.
80. See id.
81. See id. at 5.
82. See id. at 26.
percent." It is this asymmetrical stakes theory that is tested for the period following the CRA later in this Note. The results of the study conducted for this Note support the Priest Klein theory.

2. Donohue and Siegelman

John Donohue and Peter Siegelman have greatly expanded upon the Priest Klein model to control for business cycle effects and to test the model in the context of the "changing nature of employment discrimination litigation" that occurred during the late 1980s. Of particular importance to this study is Siegelman’s 1990 observation that neither doctrinal changes nor the shifting stakes throughout the business cycle will likely impact filing rates or case outcomes. This theory is tested for the period following the CRA later in this Note.

B. Expanding Upon Prior Models to Address the Current Research Questions

The study undertaken for this Note expands upon the general model formulation offered by Priest and Klein. Relying upon the suggestions of Donohue and Siegelman, the model proposed here utilizes the business cycle as a proxy for the plaintiff’s estimated

83. Id.
84. See supra Part V.B.
85. See infra Part V.
89. Siegelman, Macroeconomic Conditions, supra note 17, at 8.
90. See supra Part V.A, B.
91. See supra Part II.A.1.
92. See supra Part II.A.2.
benefit of litigation and modifies the litigation cost term to account for the manner in which Title VII costs are allocated.\textsuperscript{93} Further, this study divides the outcome data into pre-CRA and post-CRA sets and utilizes the Chow test for structural change\textsuperscript{94} to address the effect of changes in legal doctrine—an effect not found by Priest and Klein or Donohue and Siegelman.\textsuperscript{95}

III. METHOD OF DATA COLLECTION FOR THIS STUDY

A. The Administrative Office of the U.S. Courts Databases

1. Compiling the Data

District court clerks throughout the United States gather filing and termination data associated with all cases filed\textsuperscript{96} in federal court as a means of documenting the business of the federal courts.\textsuperscript{97} The Administrative Office of the U.S. Courts (AO) and the Federal Judicial Center compile the data, which is currently housed at the Inter-university Consortium for Political and Social Research at the University of Michigan (ICPSR).\textsuperscript{98} Unfortunately, the structure of the data collected has not been consistent from year to year, so there are

---

\textsuperscript{93} See supra note 17 and accompanying text.
\textsuperscript{94} See infra Part IV.B.
\textsuperscript{95} See supra Part II.A.1, 2.
\textsuperscript{96} For the rationale behind using this filing data as opposed to published opinions, see infra Part III.A.2.
\textsuperscript{97} See Inter-university Consortium for Political and Social Research, Federal Court Cases: Integrated Data Base, 1970-1997, Codebook for Civil and Appellate Data, 1996-1997, Federal Judicial Center, Oct. 1998, available at http://www.icpsr.umich.edu. The purpose of such data collection was to provide an official public record of the business of the federal courts. The data originate[d] from 100 court offices throughout the United States. Information was obtained at two points in the life of a case: filing and termination. The termination data contain information on both filing and termination, while the pending data contain only filing information. For the appellate and civil data, the unit of analysis is a single case. The unit of analysis for the criminal data is a single defendant.
\textsuperscript{98} See generally Inter-university Consortium for Political and Social Research, at http://www.icpsr.umich.edu (visited Aug. 23, 2000).
multiple “codebooks,” which provide the necessary documentation used to extract data from the collection.99

In this study, the data was obtained in the manner here described. First, annual databases were downloaded from the ICPSR.100 Second, the appropriate codebook was used to extract relevant data from the database for each year.101 Third, variables were recoded and reformatted to insure consistency in variable formats across all years. Fourth, the individual databases were aggregated into a single table comprised of nearly 5.2 million individual case records. Finally, 210,687 cases were extracted where the nature of the suit was coded by the AO as “Civil Rights, Employment”; the resulting data was then resorted by filing year and month;102 and a summary data base containing a single record for each month from January 1970 to December 1995 was constructed using the variables summarized in Table 2.103
<table>
<thead>
<tr>
<th>Code</th>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>YEAR</td>
<td>Filing Year</td>
<td>Year in which lawsuit was filed (1970-1995).</td>
</tr>
<tr>
<td>MONTH</td>
<td>Filing Month</td>
<td>Month in which lawsuit was filed. Along with year, a given month is the unit of observation, that is, there is on summary record for each month.</td>
</tr>
<tr>
<td>FED</td>
<td>Total Federal Cases Filed</td>
<td>Total number of federal cases filed in a given month.</td>
</tr>
<tr>
<td>EMPLOY</td>
<td>Federal Employment Cases Filed</td>
<td>Number of federal cases filed in a given month coded by the AO as &quot;Civil Rights, Employment.&quot;</td>
</tr>
<tr>
<td>DURATION</td>
<td>Duration</td>
<td>Mean duration of federal cases filed in a given month coded by the AO as &quot;Civil Rights, Employment&quot; (from filing to AO termination) in months.</td>
</tr>
<tr>
<td>PLAINTIFF</td>
<td>Plaintiff Wins</td>
<td>Number of federal cases filed in a given month coded by the AO as &quot;Civil Rights, Employment&quot; and resulting in a judgment for plaintiff.</td>
</tr>
<tr>
<td>DEFENDANT</td>
<td>Defendant Wins</td>
<td>Number of federal cases filed in a given month coded by the AO as &quot;Civil Rights, Employment&quot; and resulting in a judgment for defendant.</td>
</tr>
<tr>
<td>SETTLE</td>
<td>Settlement</td>
<td>Number of federal cases filed in a given month coded by the AO as &quot;Civil Rights, Employment&quot; and not resulting in a final judgment.</td>
</tr>
<tr>
<td>UNEMPLOY</td>
<td>Unemployment Rate</td>
<td>Seasonally adjusted unemployment rate for a given month as reported by the Bureau of Labor Statistics.</td>
</tr>
</tbody>
</table>

Using the AO data, the author developed the above variables in order to facilitate the statistical tests that follow. See discussion supra Part III.
2. Filings Versus Published Opinions

Significant evidence suggests that litigated disputes are far from a representative sample of the entire body of disputes, the vast majority of which are settled before ever coming to trial.\footnote{See Priest & Klein, supra note 71, at 2-3 & nn. 1-4 (1984) (citing ALFRED F. CONRAD ET AL., AUTOMOBILE ACCIDENT COSTS AND PAYMENTS: STUDIES IN THE ECONOMICS OF INJURY REPARATION 155, 241 (1964); KARL N. LLEWELLYN, THE COMMON LAW TRADITION: DECIDING APPEALS 6, 64-68 (1960); KARL N. LLEWELLYN, THE BRAMBLE BUSH: ON OUR LAW AND ITS STUDY 58 (1960); H. LAURENCE ROSS, SETTLED OUT OF COURT: THE SOCIAL PROCESS OF INSURANCE CLAIMS ADJUSTMENTS 216 (1970); see also Siegelman, Macroeconomic Conditions, supra note 17, at 8.}

Virtually all systematic knowledge of the legal system derives from studies of appellate cases. Appellate cases, of course, provide the most direct view of doctrinal developments in the law. But this doctrinal information discloses very little about how legal rules affect the behavior of those subject to them or affect the generation of legal disputes themselves.\footnote{Priest & Klein, supra note 71, at 1.}

For these reasons and because the focus of this Note is on the plaintiff's decision to file the lawsuit, data was collected on \textit{every} federal employment case \textit{filed}, whether the case was ultimately litigated or not.

3. Filing Date Versus Termination Date

The focus of this Note is settlement behavior as well as the plaintiff's initial decision to bring the lawsuit. It is conceivable that plaintiff decision-making behavior involving cases filed before, and terminated after, the enactment of the CRA would be affected by the intervening act. However, the Supreme Court refused to apply the CRA retroactively in two opinions handed down the same day.\footnote{See Landgraf v. USI Film Prods., 511 U.S. 244, 247 (1994); Rivers v. Roadway Express, Inc., 511 U.S. 298, 300 (1994).}
Two results are of particular significance to this study. First, the CRA provisions that expand available remedies in the form of non-pecuniary compensatory and punitive damages, and attendant theoretical increases in a plaintiff's expectation of the benefits that may come from litigation, were not available to cases filed before the enactment of the CRA. Second, jury trials made available under the CRA to plaintiffs seeking damages that arguably increase the plaintiff's estimate of the probability of successful litigation, were likewise not available to cases filed before the CRA was enacted.

Since the statute and the legislative history of [the CRA] do not express a clear Congressional intent that the provisions permitting awards of compensatory and punitive damages should have retroactive application, they do not apply to cases arising before the enactment of [the CRA]. Furthermore, since jury trials are available under [the CRA] only when a plaintiff seeks damages, that provision also is not applied retroactively. This is true despite the fact that jury trials are the kind of procedural provisions that would normally apply retroactively to trials conducted after the effective date of the statute, even if the conduct occurred before the effective date.

Therefore, this Note groups the outcome data according to the filing date, resting on the theory that the plaintiff's evaluation of the case at that time would determine the decision to file the lawsuit as well as the posture maintained during subsequent settlement negotiations. Within this framework then, in cases where the CRA intervened between the filing of the case and its termination, the CRA should not have altered the plaintiff's evaluation.

108. See id.
109. Id.
B. Bureau of Labor Statistics Unemployment Data

The author retrieved seasonally adjusted unemployment levels for the civilian labor force aged sixteen years and over from the Bureau of Labor Statistics’ Web site. Monthly data for years ranging from 1970 to 1995 were then extracted and the author merged that data into the case database.

IV. STATISTICAL METHODOLOGY

A. Validating the Model of Plaintiff Decision Making

Variables were first identified that are related to the components of the plaintiff decision-making model. Drawing upon the example of previous studies relating the business cycle to the adjudication rate, seasonally adjusted unemployment rates, lagged two quarters, were utilized as a proxy for (B), the plaintiff’s estimate of the benefits that might accrue from the decision to litigate. Based on the assumption that retaining reasonable counsel would result in a subjective probability of success that would be about the same as the actual plaintiff win rate, the actual plaintiff win rate reported by the AO was used as representative of (P), the plaintiff’s subjective

111. See supra Introduction.
112. See Priest & Klein, supra note 71; Siegelman, Economic Analysis, supra note 13, at 3-4; Siegelman, Macroeconomic Conditions, supra note 17, at 8.
113. See supra Part III.B.
114. See infra Table 3. While it is often the case that dependent variables in a given time period are related to explanatory variables observed in the same time period, it is not uncommon that the values dependent variables are affected by the values of explanatory variables from previous time periods. For example, models designed to relate sales volumes to advertising expenditures often indicate that sales in the current period are most strongly affected by advertising expenditures during previous periods. These variables from previous periods are known as lagged variables. See TERRY E. DIELMAN, APPLIED REGRESSION ANALYSIS FOR BUSINESS AND ECONOMICS 389-90 (1991). In this study, various models were tested to determine the appropriate lagging periods. See infra Table 3. A two-quarter lag was chosen on the basis of relative levels of significance.
115. See supra Introduction.
116. See supra Part III.A.1.
probability of success. Finally, while information regarding actual costs of litigation was not available, the duration of a case was computed from the available data. The mean duration of federal employment cases filed in a given month was utilized as a proxy for (C), the costs (including monetary costs, temporal costs, and psychological costs) associated with the litigation.

The author hypothesized that the plaintiff's expected value of the decision to litigate, and as a result the plaintiff's filing rate, would be a function of these variables. A preliminary regression model utilizing UNEMPLOY2, PLAINTIFF, and DURATION as independent variables and EMPLOY as the dependent variable offered highly significant $t$ statistics for all coefficients and an overall $F$ statistic that was highly significant, suggesting that the model has excellent explanatory power.

117. See supra Introduction.
118. See supra Part III.A.1.
119. See supra Introduction.
120. See id.
121. See infra Table 4, Model 1. The $t$ statistic for each coefficient is used to test the hypothesis that the true value of that coefficient is zero. The $p$-values may be thought of as the probability that the coefficient observed "would be obtained from a random sample of size $n$ drawn from a population [where the population parameter is zero]." JACOB COHEN & PATRICIA COHEN, APPLIED MULTIPLE REGRESSION/CORRELATION ANALYSIS FOR THE BEHAVIORAL SCIENCES 52 (2d ed. 1983). A small reported $p$-value indicates that it is unlikely that the parameter estimated by the coefficient is actually zero and increases the statistical significance of the coefficient. Id. Similarly, the $F$ statistic reported for each regression is used to test the hypothesis that the coefficients of all the explanatory variables are zero. Id.


TABLE 3
MODELS TO IDENTIFY LAG IN UNEMPLOYMENT RATE EFFECT

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNEMPLOY</td>
<td>73.18929</td>
<td></td>
<td></td>
<td>14.98942</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.37E-12</td>
<td></td>
<td></td>
<td>0.683239</td>
<td></td>
</tr>
<tr>
<td>UNEMPLOY1</td>
<td></td>
<td>81.43393</td>
<td>-41.52567</td>
<td>-63.33448</td>
<td></td>
</tr>
<tr>
<td>(Lagged 1 quarter)</td>
<td></td>
<td>1.21E-15</td>
<td>0.179158</td>
<td>0.305438</td>
<td></td>
</tr>
<tr>
<td>UNEMPLOY2</td>
<td></td>
<td>87.71795</td>
<td>126.6937</td>
<td>134.5976</td>
<td></td>
</tr>
<tr>
<td>(Lagged 2 quarters)</td>
<td></td>
<td>5.77E-19</td>
<td>4.07E-05</td>
<td>0.000231</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>54.56904</td>
<td>73.41303</td>
<td>93.71045</td>
<td>47.91926</td>
<td>31.89229</td>
</tr>
<tr>
<td>Significance</td>
<td>2.37E-12</td>
<td>1.21E-15</td>
<td>5.77E-19</td>
<td>2.86E-18</td>
<td>2.08E-17</td>
</tr>
</tbody>
</table>

Note: N=246 for all models, from Jul 1970 (to account for lags) to Dec 1990. P-values below.

Each model consists of those variables where results are provided in the table. For example, Model 1 contains only UNEMPLOY whereas Model 4 contains both UNEMPLOY1 and UNEMPLOY2. Model 5 contains all three variables.

B. The Chow Test for Structural Change

The Chow test is a common application of the $F$ test\(^{122}\) as a test for structural changes, that is, a test for differences between two or more regressions.\(^{123}\) The procedure has been used, for example, to identify structural changes in models of gasoline consumption engendered by the oil embargo of 1973.\(^{124}\) In the study reported in this Note, the author employed the Chow test to compare a regression model of

\(^{122}\) See discussion supra note 121. In this case, the $F$ statistic is used to test the hypothesis that there is no difference between the two regressions.


\(^{124}\) See Greene, supra note 123, at 288.
plaintiff decision-making prior to the CRA with an identical model based on observations after the CRA was enacted.

V. RESULTS

A. The Structural Change in Legal Doctrine Hypothesis

The key hypothesis of this Note is that a statistically significant structural change in plaintiff decision making with regard to employment discrimination litigation occurred as a result of changes in legal doctrine engendered by the CRA. Visual inspection of the time series data invites this conclusion. Further, statistical results support this conclusion. In a model regressing plaintiff-filing rate on the lagged unemployment rate (UNEMPLOY2), the mean duration of federal employment cases (DURATION), and the plaintiff win rate (PLAINTIFF), prior to the enactment of the CRA, all explanatory variables are highly statistically significant. However, in an identical model based on observations after the enactment of the CRA, the lagged unemployment rate and the plaintiff win rate are no longer statistically significant. Only the mean duration remains significant.

In addition, the Chow test employed to compare the pre-CRA model with the post-CRA model provides strong support for rejecting the hypothesis that there is no difference between the two regression models, allowing the conclusion that in fact a significant structural change in plaintiff decision-making related to litigation did take place at the time of CRA enactment.

125. But see Siegelman, Macroeconomic Conditions, supra note 17 and accompanying text.
126. See infra Figures 1-6.
127. See infra Table 4.
128. See discussion supra notes 108-09; infra Table 4, Model 2.
129. See discussion supra notes 108-09; infra Table 4, Model 3.
130. See supra Part IV.B.
131. See infra Table 4, Model 2.
132. See infra Table 4, Model 3.
133. The F statistic for the Chow test is computed in the following manner:
### TABLE 4

**MODELS OF PLAINTIFF DECISION MAKING**


<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Full</td>
<td>Pre CRA</td>
<td>Post CRA</td>
</tr>
<tr>
<td>UNEMPLOY2</td>
<td>67.125946</td>
<td>44.205454</td>
<td>-58.843825</td>
</tr>
<tr>
<td>(Lagged 2 quarters)</td>
<td>3.566E-12</td>
<td>5.992E-14</td>
<td>0.2539627</td>
</tr>
<tr>
<td>DURATION</td>
<td>-126.02729</td>
<td>-53.903256</td>
<td>-165.60528</td>
</tr>
<tr>
<td></td>
<td>3.423E-57</td>
<td>1.481E-18</td>
<td>1.507E-06</td>
</tr>
<tr>
<td>PLAINTIFF</td>
<td>5.6488874</td>
<td>4.0359558</td>
<td>5.0219438</td>
</tr>
<tr>
<td></td>
<td>7.49E-06</td>
<td>1.552E-07</td>
<td>0.0341481</td>
</tr>
<tr>
<td>N</td>
<td>186</td>
<td>136</td>
<td>50</td>
</tr>
<tr>
<td>F</td>
<td>205.36576</td>
<td>55.090193</td>
<td>56.190565</td>
</tr>
<tr>
<td>Significance</td>
<td>3.611E-58</td>
<td>3.712E-23</td>
<td>2.031E-15</td>
</tr>
</tbody>
</table>

Note: P-values below.

\[
F(df_n, df_d) = \frac{(SSE_{Full} - SSE_{Pre} - SSE_{Post})/df_n}{(SSE_{Pre} + SSE_{Post})/df_d}
\]

*See Chow, supra note 123, at 591-605; Greene, supra note 123, at 287; Gujarati, supra note 123, at 443-46. Applying this formula to the data gathered for this study, the result is as follows:*

\[
F(4,178) = \frac{(3299881 - 595987 - 789549)/4}{(595987 + 789549)/(136 + 50 - 8)} = 61.23
\]

The tabled critical value for \( F (4,178) = 3.41 \) at the .01 level of significance. Therefore, an \( F \) statistic larger than 3.41 provides support for the rejection of the hypothesis that the two regressions are not different. Because 61.23 is significantly greater than 3.41, it can be concluded with a high level of confidence that a structural change has taken place. *See supra Part IV.B.*
Figure 1. - The trend of federal employment discrimination lawsuits filed between 1970 and 1995 as compared to the seasonally adjusted unemployment rate.

Figure 2. - The trend of federal employment discrimination lawsuits filed between 1970 and 1995 as compared to the trend of the mean monthly duration of federal employment discrimination lawsuits.
B. The Asymmetrical Stakes Hypothesis

Priest and Klein have described the expected outcome where asymmetrical stakes exist between litigating parties as follows:

Where defendants stand to lose more from adverse verdicts than plaintiffs stand to gain, the relative calculus of the parties with respect to litigation and settlement changes. Defendants in general will be willing to offer greater amounts to settle disputes, but this effect will be relatively more pronounced for disputes in which defendants face a greater chance of losing and relatively less pronounced for disputes in which defendants face a greater chance of winning. As a consequence, relatively more disputes with likely plaintiff verdicts will be settled and relatively more disputes with likely defendant verdicts will be litigated. Observing only litigated cases, defendant verdicts will be greater than 50 percent.

Support exists for the hypothesis that defendants generally have more to lose in a lawsuit than plaintiffs have to gain. This asymmetrical stakes hypothesis is also supported by the results of the study chronicled in this Note. The sharp increase in plaintiff filing rate of federal employment cases (EMPLOY) is somewhat associated with an increase in the settlement rate (SETTLE). However, while the change in defendant’s win rate essentially mirrors the rapid increase in filings, the plaintiff’s win rate has significantly lagged since the enactment of the CRA.
Figure 3. - The trend of federal employment discrimination lawsuits filed between 1970 and 1995 as compared to the trend of federal employment discrimination lawsuits litigated and won by plaintiff.

Figure 4. - The trend of federal employment discrimination lawsuits filed between 1970 and 1995 as compared to the trend of federal employment discrimination lawsuits litigated and won by defendant.
Figure 5. - The trend of federal employment discrimination lawsuits filed between 1970 and 1995 as compared to the trend of the ratio between federal employment discrimination lawsuits litigated and won by plaintiff and federal employment discrimination lawsuits litigated and won by defendant.

Figure 6. - The trend of federal employment discrimination lawsuits filed between 1970 and 1995 as compared to the trend of federal employment discrimination lawsuits settled before final judgment.
Figure 7. - The trend of all federal lawsuits filed between 1970 and 1995 as compared to the trend of federal employment discrimination lawsuits filed during the same period.

C. The Litigious Society Hypothesis

Despite the conventional wisdom that the United States’ overly litigious society accounts for an increase in lawsuits, the results of the author’s research do not support that hypothesis. As Figure 7 illustrates, the overall filing rate of federal cases of all types has been trending downward since the mid 1980s, but the filings of federal

141. See generally Cheung Phei Chiet, US Disclosure Rules Won’t Work in Singapore, BUS. TIMES (Singapore), Aug. 17, 2000, at 11 (describing the Singapore government’s contempt for the litigious society in the United States); Susan Flockhart, What Do You Do If Your Life Goes Down the Toilet? Sue Someone, of Course, SUNDAY HERALD, Jan. 30, 2000, at 9 (describing parents who saved a used, split condom in hopes of “securing] compensation for the unfortunate accident of the birth”); William E. Richardson, Putting an End to Frivolous Lawsuits, WASH. TIMES, Apr. 28, 1999, at A18 (describing a plaintiff who brought suit against toothbrush makers and the American Dental Association for failing to warn about toothbrush abrasion to his gums); Karen Testa, Sick of Soap Suits, Clubs Ban the Lather, DETROIT NEWS, Mar. 25, 1999, at A17 (describing health clubs that have banned soap in the showers due to the prevalence of “slip and fall” litigation). But see Firms Accept More Work as Frivolous Lawsuits Decrease, RESOURCE, June 1, 2000, at 9 (describing the falling rate of frivolous lawsuits reported by the American Consulting Engineers Council); Friends Understand, STATE J. REG. (Springfield), Oct. 7, 1999, at 4 (applauding the extension of concern and compassion, rather than the filing of lawsuits, in response to sickness linked to e. coli bacteria).
employment discrimination cases trended slightly downward from the mid 1980s until 1991, then spiked precipitously upward.  

CONCLUSION

The results of the study reported here suggest that the Civil Rights Act of 1991 did, in fact, engender a significant structural change in legal doctrine that has had a dramatic effect on the plaintiff's decision to escalate an employment dispute to litigation. The filing rate has increased and this increase cannot be accounted for by the popular explanation of an overly litigious society. Plaintiffs are apparently filing lower quality lawsuits and predictably, their win rates are declining. However, due to defendant stakes in reputation and adverse precedent that are not matched by potential gains to the plaintiff, defendants are more likely to be willing to settle. These effects are aggravated by the increased uncertainty brought about by the availability of jury trials and the expansion of remedies to include non-pecuniary compensatory and punitive damages.

These changes have not come without a price. The federal docket is clogged by the spiraling increase in employment related litigation. Because of the unusual rule in Title VII regarding cost allocation, plaintiffs theoretically need an even lower estimated likelihood of success in order to rationally decide to sue. The defendant pays his own costs regardless of the outcome, and can be ordered to pay the plaintiff's costs if the plaintiff prevails.

142. See supra Figure 7.
143. See discussion supra note 134 and accompanying text.
144. See supra Figure 7.
145. See supra Part V.C.
146. See supra Figures 3 & 5.
147. See supra Part V.B.
149. See supra Part I.E.4.b.
150. See supra note 21 and accompanying text.
151. See supra Figure 7; see also supra note 20 and accompanying text.
152. See supra note 17 and accompanying text.
153. Id.
154. Id.
Employers seem to believe that if they have not already been sued, they certainly will be sued. Consequently, the projected costs of that anticipated litigation are now merely considered to be a "cost of doing business." Presumably, these costs are then passed down through the marketplace.

The trend of changes in legal doctrine that precipitated this increase in the expected value of the plaintiff's decision to litigate has not yet stalled. The Supreme Court in Kolstad v. American Dental Ass'n recently held that "an employer's conduct need not be independently 'egregious' to satisfy . . . requirements for a punitive damages award." Armed with a decade's worth of experience, it may be time for Congress to revisit this issue.

Gregory Todd Jones

155. Michael Selmi, The Value of the EEOC: Reexamining the Agency's Role in Employment Discrimination Law, 57 Otto St. L.J. 1 (1996). "[A] high volume of nonmeritorious cases may lead an employer to conclude that it will be sued regardless of what it does, which in turn may decrease compliance incentives." Id. at 51.

156. See Kermit M. Burley Jr. & Louis R. Lessig, When Employers are Liable for Supervisor Harassment, 13 ANDREWS EM. LITIG. REP. 12. (July 13, 1999). "[T]he Supreme Court and the EEOC have taken the position that employment liability is now a cost of doing business." Id. (emphasis omitted).

157. See supra Part I.E; Table I.


159. Id. at 546.

160. The author wishes to express his sincere gratitude to Dr. Joe Katz of the Georgia State University College of Business Administration, Dr. William Edmundson of the Georgia State University College of Law, Rebecca Brannan of the Georgia State University Law Review, Dr. Reidar Hagvert of the University of Georgia, Gwynn Coleman of the Administrative Office of the U.S. Courts, Angela Levy of the Federal Judicial Center, and Mary Morris of the Inter-university Consortium for Political and Social Research for their invaluable assistance with the preparation of this Note. In addition, the author is indebted to Tiffani Moody of the Georgia State University Law Review, whose outstanding editing skills made this Note a far better read, and to Kelli Dutoit, Editor-in-Chief of the Georgia State University Law Review for her gentle, but firm leadership. Finally, cheers to Darren Summerville, Managing Editor of the Georgia State University Law Review, and his wife Kristin, whose first son, Courtland, arrived during the editing of this book.