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Mandatory Disclosure: A Controversial Device With No Effects

Kuo-Chang Huang*  

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I. Introduction

Discovery has been the core controversy in our civil procedure jurisprudence for over sixty years. Among all provisions in the Federal Rules of Civil Procedure,\(^1\) the discovery provisions have been most frequently amended.\(^2\) Of all the discovery amendments, the mandatory disclosure amendments have been the most controversial. They rest on a notion which is antagonistic to the deep-rooted philosophy of the adversary system,\(^3\) and they contravene the FRCP's fundamental character of transubstance.\(^4\) Moreover, they divide the uniform world of federal courts into intricate and diverse practices among different districts,\(^5\) which is directly repugnant to the ideal of uniform practice held by the framers of the FRCP.\(^6\)

Mandatory disclosure entered the discovery system as part of the 1993 FRCP amendments. While some commentators suggest that the amendments were inspired by distortion of actual discovery practice and motivated by a political agenda,\(^7\)

\(^1\) FED. R. CIV. P. [hereinafter FRCP].
\(^2\) See FED. R. CIV. P. 26-37 advisory committee's note.
\(^3\) See discussion infra Part II.A and accompanying text.
\(^4\) See FED. R. CIV. P. 26(a)(1)(E) (proposed June 30, 1998), reprinted in 119 S. Ct. 1, 36. The proposed amendment to Rule 26(a)(1) exempts eight types of cases from mandatory disclosure. See id.
\(^5\) See FED. R. CIV. P. 26(a)(1). Under the current rule, district courts are allowed to opt out of the mandatory disclosure rule. See id.
\(^6\) See discussion infra Part II.A and accompanying text.
\(^7\) See, e.g., Linda S. Mullenix, Symposium on Civil Justice Reform: Discovery in Disarray: The Pervasive Myth of Pervasive Discovery Abuse and the Conse-
mandatory disclosure was intended to cure the problems associated with discovery, i.e., the prolonged process, the high costs, and asserted abuse, by “accelerat[ing] the exchange of basic information about the case and eliminat[ing] the paper work involved in requesting such information.” Under Rule 26(a)(1) both parties must disclose certain ‘core information.’ This includes information which must be turned over at the outset of litigation without formal discovery requests, such as the identity of witnesses likely to have discoverable information, the documents relevant to disputed facts, the computation of damages, and any insurance agreements. In addition, parties are not allowed to initiate formal discovery until they “meet and confer” in compliance with Rule 26(f). The basic idea of mandatory disclosure was to facilitate the communication of ‘core information’ between the parties and to eliminate the need for certain discovery activities, thereby accomplishing the goals of reducing discovery costs and facilitating the early disposition of cases.

Despite the commendable goals of mandatory disclosure, the amendments triggered extensive and forceful opposition. This is evident in the fact that the Supreme Court, normally passive in the rulemaking process, promulgated the mandatory disclosure provision by only a 6-3 margin. Three Justices voiced their strong objections through Justice Scalia’s dissent-
ing statements. The arguments against mandatory disclosure range from concerns about the adversary system to claims of increasing costs and delays. Critics continually argue that the notion of mandatory disclosure departs from the deep-rooted foundation of the Anglo-American adversary system, increases discovery costs, and prolongs case disposition.

These powerful criticisms prompted a compromise which allows the district courts to “opt-out” of the mandatory disclosure rule, an unprecedented practice since the adoption of the FRCP in 1938. Since the adoption of the mandatory disclosure rule, the federal courts are no longer a unitary entity. A great majority of district courts have either adopted their own particular rules regulating discovery practices or “opted-out” of mandatory disclosure.

Despite the pressures prompting the creation of the “opt-out” rule, the compromise rule did not end the arguments about mandatory disclosure. Fierce disputes continue among scholars, practicing attorneys, and judges with regard to the consequences of mandatory disclosure. These arguments can be classified into three main categories: a traditional legal analysis, a law and economics analysis, and an empirical analysis. Also, most of the literature opposing mandatory disclosure challenges the wisdom of introducing such a device. As a result, the Advisory Committee on Civil Rules requested the Rand Institute for Civil Justice and the Federal Judicial Center to conduct

15. See id.
16. See discussion infra Parts II-III.
17. See discussion infra Parts II-III.
18. See D. STIENSTRA, IMPLEMENTATION OF DISCLOSURE IN UNITED STATES DISTRICT COURTS, WITH SPECIFIC ATTENTION TO COURTS’ RESPONSES TO SELECTED AMENDMENTS TO FEDERAL RULE OF CIVIL PROCEDURE 26 (Federal Judicial Center March 30, 1998) (introducing the different rules governing the disclosure among different district courts); see also Erwin Chemerinsky & Barry Friedman, The Fragmentation of Federal Rules, 46 Mercer L. Rev. 757, 758 (1995) (“Almost no one is heard to offer support for the notion that the fundamental decision made in 1938 ought to be reversed.”).
19. See id.
20. See id.
21. See discussion infra Parts II-IV.
23. See infra Parts II, III, and IV.
two empirical studies on the influences and effects of mandatory disclosure. As a ramification of these two studies, the Advisory Committee proposed to further amend the mandatory disclosure rule by limiting its scope and by eliminating the “opt-out” provision to restore uniform practice within federal courts. These proposed rules currently have been approved by the Judicial Conference and are pending before the Supreme Court.

This Article reviews the arguments surrounding mandatory disclosure and analyzes their respective merits. Section II discusses the traditional legal arguments pertaining to mandatory disclosure, including its relation to the adversary system, its impact on information production, and the satellite litigation anticipated to develop from mandatory disclosure. Section III analyzes the influence of mandatory disclosure from a legal and economic perspective on three topics: settlement rates, litigation costs, and strike suits under the mandatory disclosure scheme. Section IV assesses two empirical studies of mandatory disclosure, the Rand report and the FJC report, finding these reports to be inconclusive. Finally, this Article conducts an independent empirical study and reports its result in Section V. This new empirical study tests the impact of mandatory disclosure on settlement rates as well as on time to case disposition. There is no evidence showing that mandatory disclosure...

24. See Memorandum from Paul V. Niemeyer, Chair, Advisory Committee on Civil Rules to Honorable Alicemarie H. Stotler, Chair, Committee on Rules of Practice and Procedure (June 30, 1998) quoted in 119 S. Ct. 1, 1-20.

25. See id. at 34-41 (Preliminary Draft of Proposed Amendments to Federal Rules of Civil Procedure) (listing proposed amendment to Rule 26(a)).

26. See id. The proposed Rule 26(a)(1) limits the scope of mandatory disclosure to information supporting the disclosing party's position, while the current Rule 26(a)(1) requires parties to disclose information relevant to disputed facts alleged with particularity in the pleadings whether it supports or damages the disclosing party’s position. See id.


disclosure accomplished its intended goal. The criticism that mandatory disclosure would reduce settlement rates is also unfounded. Nevertheless, because of the systematic waste and unnecessary costs of mandatory disclosure, this Article argues that it is desirable to eliminate mandatory disclosure.

II. Traditional Legal Arguments

A. Adversary System

A fundamental objection to mandatory disclosure lies in its incompatibility with the American adversary system. A primary example of such an argument is found in Justice Scalia's dissenting opinion to the 1993 Amendment to Rule 26 of the FRCP: "The proposed new regime does not fit comfortably within the American judicial system, which relies on adversarial litigation to develop the facts before a neutral decisionmaker." The gravamen of this objection is that mandatory disclosure forces one party to volunteer the information he has and, as a consequence, helps the opposing party prepare his case.

A survey of the origin of mandatory disclosure reveals that mandatory disclosure was clearly intended to correct the problems of the adversary system in the pretrial phase. However, a closer inquiry into the historical background and basic philosophy of the discovery system reveals that this is not the whole story. The challenge to the adversary system did not originate with mandatory disclosure, but rather can be traced to the birth of the whole discovery system. To suggest that mandatory disclosure violates the spirit of the adversary system is to obscure the real focus of the controversy. The real issue is whether mandatory disclosure pushed civil litigation further away from the pure "sporting theory" of the adversary system than discovery did.

30. See discussion infra Part II.A.
32. Id.
33. See id.
35. See discussion infra Part II.A.2.
36. See discussion infra Part II.A.2.
1. The Root of Controversy—The Attack on Adversary Character in the Pretrial Phase

It has been widely recognized that the idea of mandatory disclosure came from two law review articles.37 The two authors also played an important role in implementing this idea in the 1993 FRCP amendments.38 These two authors, Wayne D. Brazil and William W. Schwarzer, challenged the appropriateness of the adversary nature of the pretrial process and advocated to transform it into a non-adversary system.39 These ideas formed the basic philosophical foundation of their mandatory disclosure proposals.40

In his influential law review article entitled The Adversary Character of Civil Discovery: A Critique and Proposals for Change, Brazil argued that the adversary character of discovery inevitably imposes gamesmanship and undue burdens on civil litigation.41 Consequently, only a fundamental shift from its adversarial nature could bring about meaningful reform.42 Brazil posited that the purpose of discovery is to ascertain the truth of disputed facts and to end gamesmanship in litigation. The means to accomplish this is the facilitation of the mutual exchange of information and evidence relevant to the disputed facts.43 Brazil cited numerous authorities to support the position that discovery was intended to end the "sporting theory" of justice and to search for truth through full disclosure of all relevant facts without regard to which party was in possession of

38. See Bell et al., supra note 13, at 17 (Brazil and Judge Schwarzer were the main promoters of mandatory disclosure in the 1993 amendments). Professor Brazil became a member of Advisory Committee in 1988 and Judge Schwarzer was appointed as Director of the Federal Judicial Center.
39. See generally Brazil, supra note 34. See also Schwarzer, supra note 37.
40. See generally Brazil, supra note 34. See also Schwarzer, supra note 37.
41. See Brazil, supra note 34, at 1296-97 ("The adversary structure of the discovery machinery creates significant functional difficulties for, and imposes costly economic burdens on, our system of dispute resolution. Because these difficulties and burdens are an inevitable consequence of adversary relationships and competitive economic pressures, they cannot be removed by the kind of limited, non-structural discovery reforms . . . ").
42. See id. at 1296-97.
43. See id. at 1298-99.
the evidence. Brazil further argued that “the unarticulated assumption underlying the modern discovery reform movement was that the gathering and sharing of evidentiary information should, and would, take place in an essentially nonadversarial environment.” Brazil observed, however, that devices within the discovery scheme still led parties to take an adversarial posture during discovery and that economic incentives still drove attorneys to continue the gamesmanship in pursuit of their clients’ interests. Brazil claimed that the “adversary pressure and the competitive economic impulses inevitably work to impair significantly, if not to frustrate completely, the attainment of the discovery system’s primary objectives.” Brazil concluded that “discovery cannot serve effectively its intended purposes unless substantial changes are made both in the environment in which it is conducted and in the extent and quality of judicial control over its processes.”

In order to change the basic character of discovery from adversarial to non-adversarial, Brazil proposed to alter the attorneys’ roles and obligations during the pretrial process. Under his proposal, attorneys should play the role of the courts’ officers instead of their clients’ partisan advocates. Accordingly, their loyalty should shift from their clients’ partisan interests to the courts’ search for the truth. To achieve this goal, Brazil proposed new rules for civil procedure and professional ethics tailored to these changes. More significantly, his reform package included narrowing the scope of the attorney-client privi-

44. See id. at 1299-1303.
45. Id. at 1303.
46. See Brazil, supra note 34, at 1304 (“[Discovery] also has provided attorneys with new weapons, devices, and incentives for the adversary gamesmanship that discovery was designed to curtail.”) (alteration in original) and 1315-31 (describing how attorneys use discovery tools to distort the facts and obtain an unjust victory).
47. See id. at 1304 (“Attorneys conducting discovery still are commanded by the rules of professional responsibility and by their own economic self-interest to commit their highest loyalty to their clients’ best interests.”).
48. Id. at 1303.
49. Id. at 1348.
50. See id. at 1349.
51. See Brazil, supra note 34, at 1349.
52. See id.
53. See id.
le and the work product doctrine.\textsuperscript{54} However, the most extreme aspect of his proposal was to increase judicial involvement in the truth-finding process to the extent that the court should be authorized to investigate evidence on its own initiative.\textsuperscript{55}

A decade later, William W. Schwarzer joined Brazil in challenging the adversarial nature of the discovery process in his law review article entitled \textit{The Federal Rules, The Adversary Process, and Discovery Reform}.\textsuperscript{56} Schwarzer made two major arguments which supported his position. The first argument focused on all aspects of the adversary process, including the presence of a neutral tribunal, the preparation and presentation of the case by the parties, and a structured procedural system to find the truth.\textsuperscript{57} These aspects do not, or should not, exist in the process of discovery because (1) the judges under the FRCP are managerial rather than uninformed and impartial,\textsuperscript{58} (2) giving parties the control over case representation and preparation invites partisan misconduct and gamesmanship,\textsuperscript{59} and (3) discovery with an adversarial character frustrates rather than promotes the truth-finding function.\textsuperscript{60}

The second argument emphasizes the attorney's conflicting and tension-producing obligation under the system of adversarial discovery. The attorney must balance his duty to disclose truthful information with his duty to protect his client's best interest.\textsuperscript{61} Accordingly, Schwarzer concluded that "the truth-finding mechanisms of the adversary process, for the most part, do not function during discovery and pretrial. But the adver-

\textsuperscript{54} See id. at 1351 ("It is important to note, however, that meaningful disclosure probably could not be accomplished without significantly narrowing the current reach of both the attorney-client privilege and the work product doctrine.").

\textsuperscript{55} See id. at 1357. A court should be empowered, for example, to pose written or oral questions to parties, witnesses, or attorneys whenever the court is unsatisfied with the quality or comprehensiveness of questions propounded by counsel. Similarly, a court on its own initiative should be able to request admissions of facts and the production of documents from parties. See id.


\textsuperscript{57} See id. at 706 (adopting Professor Lon Fuller's criteria for an adversary system).

\textsuperscript{58} See id. at 706-08.

\textsuperscript{59} See id. at 709-12.

\textsuperscript{60} See id. at 712-13.

\textsuperscript{61} See Schwarzer, supra note 37, at 713-16.
sarial habits engendered by the process remain, and at this stage they are counter-productive."\(^{62}\) In order to restore the ultimate goal of truth-finding, however, the emphasis should be placed upon the objective of seeking the truth, rather than on the process of discovery.\(^{63}\) Accordingly, Schwarzer proposed a structure under which parties would be obliged to disclose all relevant information automatically, prohibiting further discovery unless ordered by the court.\(^{64}\)

Putting the two proposals together, it is clear that their ultimate objective was to completely overturn the adversary relationship during the pretrial stage, transforming the process into a cooperative, truth-seeking relationship between the plaintiff, the defendant, and the court.\(^{65}\) While there are substantial doubts about the feasibility of these proposals,\(^{66}\) it is not this Article's purpose to examine these questions. Rather, the purpose of tracing the root of mandatory disclosure is to show the gap between the proposed model and the disclosure rules which were actually adopted, and to evaluate the merits of the criticism based on inconsistency with the adversary system.

A comparison between the authors' proposed rules and the current mandatory disclosure rule reveals that the 1993 Amendments adopted only the form of the proposal without embracing its essential substance.\(^{67}\) As a result, all devices that cause adversarial discovery battles have remained intact.\(^{68}\) Also, the attorney-client privilege and the work product doc-

\(^{62}\) Id. at 713.

\(^{63}\) See id. at 721 ("One approach might be to restructure the existing discovery rules by shifting the emphasis from discovery—the process—to disclosure—the objective.").

\(^{64}\) See id. at 721-22 (articulating the basic rules and principles under his proposal).


\(^{66}\) For example, how to mitigate the attorneys' economic pressure to act impartially, and what incentives exist in their scheme to motivate both parties to objectively search the truth.


\(^{68}\) See supra note 67.
trine have maintained their original scope. Thus, the attorney’s principal duty is still owed to the client, not to the court. The attorneys, as paid warriors, continue to fight the battles associated with mandatory disclosure. Likewise, the features of the adversary system remain pervasive in the disclosure phase as well as in the discovery phase. This persistence may be attributable to the criticisms engendered by the proposals of Brazil and Schwarzer.

In fact, the only significant change made by the mandatory disclosure rule is that it places an additional tier upon the discovery system. It does not fundamentally alter the adversary system. While it may be argued that mandatory disclosure pushed the pretrial process away from the adversary system, it is important to recognize that this departure actually originated in the discovery system. This departure was the fundamental basis for the entire discovery scheme. To suggest that mandatory disclosure violates the American procedural orientation of the adversary system is to obscure the real issue.

2. The Real Focus of Controversy—The Difference Between Discovery and Disclosure

The historical background and the intended purpose of discovery illustrate that discovery was designed to cure the deficiencies of the adversary system. Before the adoption of the FRCP in 1938, the “sporting theory” of justice under the adversary system had been widely criticized as causing gamesmanship and jeopardizing the finding of the truth. One of the most

69. See supra note 67.
70. See generally, Bell et al., supra note 13, at 48.
71. See discussion infra notes 75-79 and accompanying text.
72. See discussion infra notes 75-79 and accompanying text.
73. See discussion infra notes 75-79 and accompanying text.
74. See discussion infra notes 75-79 and accompanying text.

[The sporting theory of justice] leads the most conscientious judge to feel that he is merely to decide the contest, as counsel present it, according to the rules of the game, not to search independently for truth and justice. It leads counsel to forget that they are officers of the court and to deal with the rules of law and procedure exactly as the professional football coach with the rules of the sport. It leads to exertion to ‘get error into the record’
important objectives of the FRCP was to correct these problems. 76 Among all the devices within the FRCP, discovery was thought to be the most effective to achieve this goal. The drafters of the discovery rule state:

It is probable that no procedural process offers greater opportunities for increasing the efficiency of the administration of justice than that of discovery before trial. Much of the delay in the preparation of a case, most of the lost effort in the course of the trial, and a large part of the uncertainty in the outcome, result from the want of information on the part of litigants and their counsel as to the real nature of the respective claims and the facts upon which they rest. 77

The significance of pretrial discovery expansion was pointed out by a commentator who stated that "[a]mong the most fundamental and most promising reforms of the adversary system in modern times has been the expansion of pretrial discovery." 78 Aimed at ameliorating the adversary system, discovery pioneered the departure from the traditional rival relationship between the two parties. Under discovery, each party is entitled to demand that the other party provide information or documents as long as they are relevant to the subject of the litigation, are not privileged, and the other party is obliged to disclose them. 79

rather than to dispose of the controversy finally and upon its merits. It turns witnesses, and especially expert witnesses, into partisans pure and simple. It leads to sensational cross-examination 'to affect credit,' which have [sic] made the witness stand 'the slaughter house of reputations.' It prevents the trial court from re-straining the bullying of witnesses and creates a general dislike, if not fear, of the witness function which impairs the administration of justice.

Id.


The fundamental premise of the federal rules is that a trial is an orderly search for the truth in the interest of justice rather than a contest between two legal gladiators with surprise and technicalities as their chief weapons.

29 F.R.D. at 213.

77. Edson R. Sunderland, Foreword to George Ragland, Jr., Discovery Before Trial (Chicago: Callaghan & Co., 1932), at iii.


Nevertheless, the modern discovery system does not totally abandon the traditional orientation of the adversary system. Currently, the parties' offering of evidence, motivated by self-interest, is believed to be the most effective way to discover the truth. Discovery is intended to strike a sound balance, retaining the good and dispelling the evil. Under the modern discovery scheme, the core device intended to accomplish this goal was the work product doctrine. The work product doctrine served to preserve the competitive relationship under the adversary system by protecting each party's trial preparation and mental processes from discovery. Consequently, the modern adversary system is shaped by both discovery and the work product doctrine. The interrelation between discovery and the work product doctrine is the best indicia of how far discovery deviates from the adversary system.

The argument that mandatory disclosure violates the adversary system ignores the background and purpose of discovery. The real questions are whether mandatory disclosure pushes the discovery system further away from the adversary system and, if so, whether this additional deviation is desirable. A thorough examination of the adopted disclosure rules reveals that mandatory disclosure barely diminishes the adversary character of contemporary litigation beyond what discovery has already done.

The best indicium of movement away from the adversary system is the scope of the work product doctrine. Mandatory disclosure does not reduce the scope of the work product doctrine. As Schwarzer pointed out, mandatory disclosure does not dictate an obligation to disclose anything which would not be already obtainable upon a simple request by the opposing party. Mandatory disclosure only requires the disclosure of

81. See id. at 755.
82. See id. (explaining the basic concept of the work product doctrine).
83. See generally Clermont, supra note 80.
84. See supra notes 73-79 and accompanying text.
85. See generally Clermont, supra note 80.
86. See Schwarzer, supra note 37, at 722.
87. See id. at 721-22.
certain 'core information.' Further, the scope of such information is much narrower than what can be discovered under Rule 26(b).

While it has been argued that automatic disclosure is fundamentally different from passively responding to a discovery request, this argument loses sight of what has happened in past discovery practice. It is common discovery practice for a party to serve an open-ended request, including the disclosure of the identities of witnesses and production of all relevant documents. This practice is not prohibited by the rules and is controlled only by Rule 26(b)(2) which is intended to prevent overreaching abuse. What has been criticized under mandatory disclosure, i.e., that the attorney is required to use his professional judgment to determine what must be disclosed to benefit the opposing party, so infringing on his mental privacy and jeopardizing his functioning as his client's advocate, has likewise happened under the discovery scheme. Given the fact that the scope of mandatory disclosure is much more limited than the scope of discovery, it would be more intrusive to ask an attorney to determine that which is discoverable upon receipt of a discovery request.

Proponents of mandatory disclosure claim that such disclosure was intended to further moderate the adversary process by increasing the attorneys' obligations toward the court and by eliminating the need for a discovery request and, more impor-

88. See id.
90. See Griffin B. Bell et al., Automatic Disclosure in Discovery—The Rush to Reform, 27 Ga. L. Rev. 1 at n.159 (1992) quoting Comment from Section of Litigation, American Bar Association 6 (Feb. 7, 1992) (“[T]here is a major difference between a lawyer telling her client to look for specific documents covered by the adverse party's document request or interrogatories, and telling the client to look for documents 'that are likely to bear significantly on any claim or defense.'”).
92. See Bell et al., supra note 13, at 47-48. (“Critics have charged that, in essence, the defendant will be required to assist in making the plaintiff's case for the plaintiff. This result clearly would be contrary to the traditional notions of the lawyer's role, as set out in Hickman v. Taylor.”); 146 F.R.D. 402, 511 (Scalia J., dissenting) (“Requiring a lawyer to make a judgment as to what information is 'relevant to disputed facts' plainly requires him to use his professional skills in the service of the adversary.”) (citations omitted).
93. See Bell et al., supra note 13, at 47.
94. See id.
tantly, the opportunity to dispute such a request. 95 However, the adopted rules simply cannot fulfill this task. The attorney's ethical obligations are simply not altered. 96 Under the adopted rules, an attorney's obligation to the court is exactly the same as his obligation under the original discovery rules. 97 As to the expectation of eliminating all disputes arising from discovery requests by eliminating the need for such requests, the reality seems to have gone the other way. Parties not only have not stopped engaging in disputes arising from discovery but also seem to have found new grounds to disagree—disputes over disclosure. 98 The intended picture of harmonious cooperation has never appeared. 99 Automatic disclosure has not lessened the adversary character to any perceivable degree. 100 In essence, disclosure has done nothing more than add another tier to discovery. 101

B. Overproduction of Information

The opponents of mandatory disclosure note another potential problem—that parties may overproduce information which is not necessary in resolving the dispute. 102 Due to the vaguely defined scope of disclosure under the rules, 103 parties may be inclined to produce more information than required in order to avoid the serious consequence of violating the disclosure obliga-

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95. See Schwarzer, supra note 37, at 721-22.
96. See generally FED. R. Civ. P. 11 and 26(g).
97. See id.
98. See Bell et al., supra note 13, at 41-47.
99. See id. at 703-04.
100. See id. at 703.
101. See Bell et al., supra note 13, at 43 (alteration in original):

[The proponents of disclosure] envisioned a system in which unilateral disclosure by the parties to their opponents would eliminate the familiar caviling over whether particular documents were called for by a given request . . . . This predicted benefit of automatic disclosure is particularly problematic because it will not replace the current discovery process . . . . Rather, the new rule simply adds a new layer of disclosure, under a new standard which will create its own procedural problems.

Id.

102. See Bell et al., supra note 13, at 43-44.
103. See FED. R. CIV. P. 26(a)(1).
Thus, a direct result will be wasteful overproduction, which has been an undesirable phenomenon under discovery and could become worse under mandatory disclosure.105

This criticism was met by the argument that mandatory disclosure would not cause overproduction, but instead cure it.106 This theory proffered by mandatory disclosure proponents was that the information required under mandatory disclosure is merely a brief statement identifying witnesses with discoverable information, describing the subject matter, and revealing the location of relevant documents.107 Since no detailed information is required at this stage,108 the parties would use the disclosed information to identify useful information and conduct efficient discovery.109

In evaluating the effect of mandatory disclosure on overproduction, two different situations must be considered. The first situation is where the parties would have discovery regardless of whether there is mandatory disclosure even without disclosure. The second situation is where the parties would not need any discovery in the first place. In the first situation, the overproduction question is not as serious as opponents of mandatory disclosure contend. However, in the second situation where discovery is not needed, mandatory disclosure would clearly pro-

104. See Fed. R. Civ. P. 37(c). According to Rule 37(c), a party who fails to disclose information required by Rule 26(a) will not be allowed to introduce such information at trial. See id.

105. See Bell et al., supra note 13, at 43-44:

In the current discovery process, attorneys frequently both request and produce more documents than needed, primarily because of perceived ambiguities in the scope of the requests. The vagueness in the scope of automatic disclosure, combined with threat of sanctions under a revised Rule 26, will create an even greater incentive for this practice.

Id.

106. See Schwarzer, supra note 37, at 721-22:

With regard to persons having discoverable information, it requires a brief statement identifying them and the subjects of their information. With respect to relevant documents, it requires a 'description by category and location.' Armed with this information, the opponent should be able to request only what is considered relevant and useful, thus avoiding overproduction and leading to more cost-effective discovery.

Id.

107. See id.

108. See id.

109. See id.
duce unnecessary information. Since many federal cases commonly proceed without any discovery, a universal application of mandatory disclosure would cause an overall inefficiency on a system-wide scale.

In the first situation involving a case that would entail discovery, there is no evidence to support either the opponents' or proponents' arguments that mandatory disclosure would cause serious over-production or render discovery more effective. To start, it is essential to recognize that not all relevant information must be automatically disclosed. The information must be disclosed only when it is relevant to "disputed facts alleged with particularity in the pleadings." This "alleged with particularity" requirement was added to resolve the problem that an open-ended disclosure obligation would impose unreasonably heavy burdens on the defendant to produce piles of documents. As pointed out by the advisory committee's notes, vague allegations in the pleadings would not impose the obligation of disclosure on the other party. Accordingly, this "alleged with particularity" requirement gives useful guidance to the parties in deciding what information must be disclosed and, therefore, dispels overproduction to some degree.

110. See Bell et al., supra note 13, at 5.
111. See Judith A. McKenna & Elizabeth C. Wiggins, Empirical Research on Civil Discovery, 39 B.C.L. Rev. 785, 790 (reciting the results of different empirical studies and that 52% of the studied cases did not have formal discovery at all).
113. Id.
114. See Bell et al., supra note 13, at 24-32 for a detailed discussion. The 1991 proposed amendment required disclosure of any information that bears significantly on any claim or defense. This amendment provoked strong opposition, especially from the parties likely to be in the position of defendant. It was contended that such an open-ended disclosure obligation would leave an automobile manufacturer in a product liability suit at sea as to how many documents relating to the design and manufacture process should be disclosed, and thereby put an extremely heavy burden on the defendant. See id.
Broad, vague, and conclusory allegations sometimes tolerated in notice pleading—for example, the assertion that a product with many component parts is defective in some unspecified manner—should not impose upon responding parties the obligation at that point to search for and identify all persons possibly involved in, or all documents affecting, the design, manufacture, and assembly of the product.
116. See supra notes 112-114 and accompanying text.
It is true that whether facts are "alleged with particularity" in the pleadings is not free from dispute. Nevertheless, the procedural device of the "meet-and-confer" session under Rule 26(f) can come into play to remedy this problem. The parties would have opportunities to discuss what must be disclosed and to ascertain the scope of the disclosure obligation during the "meet-and-confer" session. This would also reduce the seriousness of the overproduction problem. On those occasions where two parties are not able to resolve their disagreement within the "meet-and-confer" session, the parties might choose to fight over this disagreement. This problem is discussed in the following section on satellite litigation.

In sum, the "alleged with particularity" limitation combined with the "meet-and-confer" process should eliminate the concern about overproduction to a significant extent. This would include situations where the parties cannot reach an agreement and the party chooses to produce more information instead of fighting over this issue. Given the fact that the scope of discovery is much wider than that of disclosure, most, if not all, of the overproduced information should still fall within the scope of discovery. Consequently, the overproduction would not be as serious a problem as asserted by the opponents of mandatory disclosure.

However, mandatory disclosure would not promote the efficiency of discovery. Proponents of mandatory disclosure claim the advantage is that parties can use the disclosed core information to identify necessary witnesses and documents. This reasoning is flawed since a simple discovery request would allow the parties to acquire the same beneficial information. One of the major problems in the discovery system, which mandatory disclosure is intended to resolve, is the situation where a party purposely abuses the discovery process in an attempt to wear down the opposing counsel. In this situation, it is difficult to see how the party who intends to abuse the discovery process would be prevented from doing so by receiving core

117. See supra notes 112-114 and accompanying text.
118. See Bell et al., supra note 13, at 43-44 for opponent's argument that overproduction is a serious problem.
119. See supra text accompanying notes 106-109.
120. See Fed. R. Civ. P. 26 advisory committee's note.
information in advance. In that situation, mandatory disclosure does not promote efficiency, but offers another opportunity for abuse. In short, the anticipated advantage of disclosure can be obtained without mandatory disclosure. Furthermore, mandatory disclosure cannot achieve the expected efficiency if parties are not willing to cooperate.

In the second situation, where parties do not need discovery at all, mandatory disclosure would force parties to produce unnecessary information and, therefore, incur wasteful litigation costs. The seriousness of this problem is magnified by the fact that most federal cases did not involve any discovery at all before the adoption of the mandatory disclosure rule. Consequently, the universal application of mandatory disclosure to all cases results in a significant, unnecessary resource consumption. From this perspective, the undesirability of mandatory disclosure is patent.

To be sure, disclosure costs on both parties may provide a great incentive for them to reach an agreement, and this may effectively mitigate the seriousness of systematic waste. However, the problem with this resolution is that it would be possible only when both parties bear comparable disclosure costs. If both parties have significantly different disclosure costs, the party with minimal, or even zero, disclosure costs would have less incentive to reach such an agreement with the other party. On the contrary, as a zealous litigant, he would want to exploit this leverage to gain advantage over the opposing party by not sparing the other party the need of mandatory disclosure.

121. See supra note 111.

122. See Fed. R. Civ. P. 26(f). Under FRCP 26(f), parties should meet at the outset of litigation to arrange for the disclosure. See id. Suppose that each party will have to spend $1500 on the disclosure of rule-required information (which is unnecessary for both parties). In order to spare themselves the unnecessary expenses, they have strong incentives to reach an agreement and relieve each other from this cost. See id.

123. For example, the cost for the plaintiff to perform the disclosure obligation is $500 while the cost for the defendant is $10,000. From the plaintiff's perspective, although he does not need the information at all, because the cost borne by the defendant will give him an advantage on the negotiation table, he is not likely to reach an agreement with the defendant and skip the mandatory disclosure stage.
Whether parties can reach a discovery agreement is a pragmatic problem and cannot be conclusively answered without resorting to an empirical study. Nevertheless, it can be assumed that if the parties cannot agree to skip mandatory disclosure in cases where no discovery is needed, the criticism that mandatory disclosure causes systematic resource waste is valid.124

C. Satellite Litigation

Another issue within the mandatory disclosure debates is whether mandatory disclosure would produce additional satellite litigation over disputes arising from the disclosure process or whether it would reduce litigation ancillary to the entire discovery process. The opponents of mandatory disclosure contended that it could increase satellite litigation in many ways.125 The first would be to fight over all issues associated with the mandatory disclosure, including whether a disputed fact is "alleged with particularity."126 Second, under the limited time imposed by the rules, a defendant may be inclined to file a motion to dismiss or a motion for a more definite statement in an effort to 'buy some time.'127 Finally, in light of the great advantage created by the sanctions for failure to disclose,128 parties have a strong motivation to move for sanctions under Rule 37.129

124. See supra text accompanying notes 122-23.
125. See discussion infra notes 126-129 and accompanying text.
126. See 146 F.R.D. 402, 510 (Scalia J., dissenting) ("[Disclosure] will likely increase the discovery burdens on district judges, as parties litigate about what is 'relevant' to 'disputed facts,' whether those facts have been alleged with sufficient particularity, whether the opposing side has adequately disclosed the required information, and whether it has fulfilled its continuing obligation to supplement the initial disclosure.") (emphasis added).
127. See Bell et al., supra note 13, at 43 ("As one Committee member warned, 'a lot of motion practice [will] be generated in bigger cases.' Faced with the daunting task of having to provide automatic disclosure under a notice pleading within fifty-six to ninety-six days of filing an answer, many defendants may be forced to file motions to dismiss or motions for a definite statement under Rule 12.") (citations omitted) (alteration in original).
128. See supra note 104 and accompanying text.
129. See Bell et al., supra note 13, at 43 ("Finally, given the increasingly adversarial nature of modern litigation, motion for sanction for non-compliance with automatic disclosure will inevitably proliferate.").
However, there are countervailing arguments. The proponents of mandatory disclosure argue that it would generally reduce disputes and motion practice during the discovery process. First, they argue that the “meet-and-confer” session under Rule 26(f) will help parties reach agreement on details of disclosure and discovery. In addition, a court order following the “meet-and-confer” session would further prevent disputes. Second, disclosure could reduce the amount of discovery activities and at the same time decrease the disputes associated with these activities. Third, disclosure would clarify what is actually relevant and what needs more development through discovery so that it should discourage lawyers from using the uncertainties that surround many discovery requests as invitations to obstruct, delay, avoid, and harass, thus spawning endless disputes and motions.

A careful analysis of the operation of mandatory disclosure within the discovery system reveals that the arguments of both the opponents and the proponents of mandatory disclosure are unfounded. On the one hand, as to the disputes relating to mandatory disclosure, the parties are unlikely to spar during the disclosure stage. The reason for this is a practical one. It is almost certain that the disputed information is discoverable during the discovery stage whether or not the information is related to the facts pleaded “with particularity.” When there is a dispute over whether the required information falls within the scope of mandatory disclosure, the party who wants the information can obtain it by a simple discovery request. Obtaining information through discovery requests is surely more efficient than motion practice. In addition, not only are there

130. See Schwarzer, supra note 37, at 722-23.
131. See id.
132. See id.
133. See id. at 723.
134. See id. at 723 (reducing the amount of discovery will create fewer opportunities for disputes that lead to motions).
135. See Schwarzer, supra note 37, at 722-23.
136. See supra note 126.
137. See FED. R. CIV. P. 26(a).
138. For the party who needs this disputed information, considering the fact that sending a discovery request is much cheaper than fighting this question with the other party through motion practice, a reasonable litigant is most likely to choose the former course.
litigation costs associated with a motion to compel, the parties are required to confer in good faith, in an effort to secure disclosure before making a motion.\textsuperscript{139} There is no sufficient reason for a party to file a motion to compel disclosure at that stage.

While it has been argued that the harsh sanctions for failure to disclose creates a great incentive to fight over disclosure,\textsuperscript{140} this argument is overstated. The key to understanding the actual effects of a court-ordered sanction is to realize that it is not automatically imposed whenever one party fails to make a mandatory disclosure.\textsuperscript{141} The rule punishes only gross violations of disclosure obligations.\textsuperscript{142} Considering that the disputed information is normally discoverable at a later stage and that consequences of a sanction are serious, it can reasonably be expected that parties are unlikely to baselessly refuse to disclose.\textsuperscript{143} Thus, a court would not normally find that a party failed to disclose without substantial justification, and sanctions would, therefore, be granted sparingly. Consequently, the slight chance of obtaining sanctions as well as the costs of motion practice would deter parties from making such motions.

On the other hand, it is not clear why mandatory disclosure would reduce discovery disputes, as proponents contend.\textsuperscript{144} To begin with, the proposition that mandatory disclosure could reduce discovery disputes by reducing the need for discovery is doubtful. In light of the fact that the disclosed information is only a summary description of certain discoverable evidence, it is unlikely that the disclosed information would completely reduce the necessity of additional discovery. Moreover, most discovery disputes involve the discoverability of the requested information.\textsuperscript{145} Before the parties make a motion to compel dis-

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\textsuperscript{140} See, e.g., Bell supra note 13, at 13 (stating that attorneys may not have a clear, financial incentive to use and overuse discovery in pursuit of a greater economic award).
\textsuperscript{141} See Fed. R. Civ. P. 37(c)(1).
\textsuperscript{142} See id. An example of sanctionable conduct is the failure to disclose without substantial justification. See id.
\textsuperscript{143} See Fed. R. Civ. P. 37.
\textsuperscript{144} See supra text accompanying notes 130-35.
\textsuperscript{145} With regard to the scope of discovery, FRCP 26(b)(1) only indicates the outer limits of discoverable information. The real boundary of the scope of discovery is shaped by the motions for protective orders under FRCP 26(c) and the mo-
\end{flushleft}
covery, they are obligated to try to resolve the disagreement.\textsuperscript{146} If the dispute is such that the parties cannot resolve their disagreement by conferring with each other under FRCP 37 before contesting the motion, it is difficult to see how mandatory disclosure or "meet-and-confer" provisions can enable the parties to reach an agreement and eliminate the need of the satellite litigation.\textsuperscript{147}

Consequently, an objective analysis leads to the conclusion that mandatory disclosure would neither increase nor decrease the satellite litigation associated with the discovery process. On the one hand, the parties would tend to ignore the disagreement during the disclosure stage and resolve it during discovery.\textsuperscript{148} On the other hand, disputes that would have occurred without mandatory disclosure would continue to arise even if certain information has been disclosed through mandatory disclosure.\textsuperscript{149}

It should be cautioned that the above analysis is conducted in a purely theoretical framework and is by no means conclusive. The most productive way to approach this issue is to resort to empirical research to determine if mandatory disclosure affects motion practice. Two empirical studies on mandatory disclosure have addressed this issue and are discussed in Section IV.\textsuperscript{150}

III. Law & Economics Analysis

As in many other fields, legal and economic analysis play an important role in the disclosure debate. Because little data exists to conclusively describe the actual effects of mandatory disclosure, the important input from law and economics analysis in this debate is its predictive ability rather than its explanatory power. However, the predictive ability of law and

\textsuperscript{146} See Fed. R. Civ. P. 26(b)(2), 26(c), and 37(a).
\textsuperscript{147} Logically speaking, if a dispute cannot be resolved by the parties' conferring in good faith under Fed. R. Civ. P. 37, it cannot be solved by their meeting and conferring under Fed. R. Civ. P. 26.
\textsuperscript{148} See supra text accompanying notes 136-143.
\textsuperscript{149} See supra text accompanying notes 144-147.
\textsuperscript{150} See discussion infra Part IV.
economics analysis is not free from doubt. To improve its predictive ability, it has been suggested that the economic analysis should be based upon the available data about actual outcomes or combined with empirical research.

Nevertheless, there are still inputs from pure law and economic analysis that try to predict the effects of mandatory disclosure. Before discussing the empirical results, it is worth introducing the current economic analysis of mandatory disclosure. Three aspects of mandatory disclosure have been studied in the legal and economics analyses: settlement rates, litigation costs, and strike suits. The analyses suggest that, contrary to the expectations of the drafters of the Rules, mandatory disclosure would reduce settlement rates, increase the litigation costs, and encourage strike suits. Because litigation costs are closely tied to settlement rates, these two aspects will be discussed together.

A. Reduced Settlement Rate and Increased Litigation Cost

Under the traditional economic analysis, cases would go to trial only when the plaintiff and the defendant disagree on either the probability of the plaintiff's success or the expected size of judgment. The disagreements were attributed to the parties' lack of sufficient information about the factual or legal issues in the case. Accordingly, it has been suggested that full disclosure of all relevant information would promote settlement.

152. See id.
154. See infra Parts III.A, III.B.
155. See infra Parts III.A, III.B.
156. See infra Part III.A.
158. See generally Priest & Klein, supra note 157.
159. See generally Priest & Klein, supra note 157.
Utilizing this standard model to analyze the effects of mandatory disclosure on settlement, it seems that mandatory disclosure would only influence the timing of settlement rather than the frequency of settlement. Since mandatory disclosure was designed to facilitate the exchange of 'core information,' and the reason for failing to settle is due to the parties' divergent assessments of the case, early communication of information should help facilitate a more accurate assessment of the case and help the parties reach an agreement earlier. Taking into account that the scope of disclosed information is much narrower than the scope of discovery and that the information disclosed under mandatory disclosure can be discovered during the discovery process anyway, no additional information is produced under the disclosure scheme that would further the extent of the parties' agreement and, hence, increase the likelihood of settlement. In sum, if there is any chance that the exchange of information can lead to agreement, mandatory disclosure, at best, can accelerate its arrival but by no means can increase its frequency.

It has been suggested that mandatory disclosure is likely to reduce settlement rates and, therefore, increase litigation costs. Two arguments support this proposition. The first is that mandatory disclosure would compel both parties to disclose adverse information which would enlarge the divergence of the parties' expectations and, thereby, increase the difficulty in reaching a settlement. Upon learning information detrimental to the defendant, it is predictable that the plaintiff would expect a greater judgment and would, therefore, demand a larger settlement. Similarly, if the defendant knows of information detrimental to the plaintiff's case, the defendant is likely to

161. See Cooter & Rubinfeld, supra note 153, at 84. ("It is not clear to us, however, that earlier provision of information will substantially reduce discovery or trial costs; in fact, it is more likely to alter the timing, rather than the extent[,] of settlements.").
162. See id. at 85 ("To the extent that settlement rates are affected, we believe it is more likely that mandatory disclosure will lead to fewer settlements, with the possibility of higher litigation costs."). See, e.g., Samuel Issacharoff & George Loewenstein, Unintended Consequences of Mandatory Disclosure, 73 Tex. L. Rev. 753 (1995).
163. See Cooter & Rubinfeld, supra note 153, at 85.
164. See id.
expect a smaller judgment and, therefore, offer less to settle.\textsuperscript{165} As a result, the settlement zone becomes smaller and, accordingly, the likelihood of reaching settlement decreases. Second, mandatory disclosure would cause bifurcation of the discovery period.\textsuperscript{166} Once the parties have borne the front-loading costs accrued in the disclosure stage, they would have fewer disincentives to proceed further. This would also reduce the settlement rate.\textsuperscript{167}

In anticipation of this decreased settlement rate, critics argued that mandatory disclosure would increase litigation costs\textsuperscript{168} because less settlement means more trials, hence more costs. While automatic disclosure would spare both parties the expenses of demanding discovery, this saving may not be classified as significant “because the cost of mechanical filing of routine early discovery is not substantial.”\textsuperscript{169} The analysis concluded that litigation costs could be saved in the disclosure scheme under only one condition—where parties have widely divergent assessments on the case, and this divergence can be eliminated considerably by the disclosed information, which was deemed to be an unlikely occurrence.\textsuperscript{170}

A reexamination of the reasons for reducing settlement rates reveals that the adverse effects of mandatory disclosure on settlement are somewhat exaggerated.\textsuperscript{171} For instance, if mandatory disclosure forced parties to disclose harmful information which would affect both settlement offers and demands, these adverse effects are mutual and would affect both parties. There is no reason to believe that, when the plaintiff discloses detrimental information to the defendant, the only effect will be to make the defendant reduce her settlement offer, and plaintiff

\textsuperscript{165} See id.
\textsuperscript{166} See Issacharoff & Loewenstein, supra note 162, at 761.
\textsuperscript{167} See id. at 761-68. See also Cooter & Rubinfeld, supra note 161, at 87 (arguing that mandatory disclosure would shift the information cost from the trial to the pretrial stage, and that the parties' incentives to settle would decrease as the trial costs diminish).
\textsuperscript{168} See Cooter & Rubinfeld, supra note 153, at 85.
\textsuperscript{169} Issacharoff & Loewenstein, supra note 162, at 786.
\textsuperscript{170} See id. at 776 (“[T]he only condition under which mandatory disclosure can be expected to reduce litigation costs significantly is one in which there is a great deal of systematic bias and in which the disclosed information leads to a considerable convergence in the positions of the parties.”).
\textsuperscript{171} See, e.g., Issacharoff & Loewenstein, supra note 162, at 759-62.
MANDATORY DISCLOSURE

will not take this into consideration. On the contrary, the plaintiff is likely to take this into account and adjust his own settlement demand accordingly. The same is true for the defendant. When both parties inject their respective advantages and disadvantages into their settlement calculation, the settlement zone would not necessarily become significantly smaller.

Furthermore, while the front-loading costs would decrease the parties' incentives to settle, this is only true during the period between disclosure and discovery. On the one hand, if the parties would have discovered the disclosed information even without mandatory disclosure, the same costs would still be borne by the parties. No additional costs would be incurred which would decrease the incentive to settle. In the situation where the case could have been settled without any discovery, the costs associated with the wasteful and unnecessary disclosure might actually promote settlement. Because both parties could have settled without any exchange of information, the costs associated with mandatory disclosure would strengthen the parties' incentives to settle prior to the mandatory disclosure stage. From this perspective, mandatory disclosure would promote settlement.¹⁷²

Viewed objectively, the competing arguments are equal in force. As recognized by the law and economics analysis, the best way to untie these tangled arguments, may be to resort to empirical research to reveal what happens in the real world.¹⁷³

B. Proliferation of Strike Suits

Opponents of mandatory disclosure have argued that such disclosure would cause the proliferation of strike suits.¹⁷⁴ Strike suits, for present purposes, are suits with no merits or

¹⁷². See Cooter & Rubinfeld, supra note 153, at 87 (acknowledging the possibility that mandatory disclosure would increase the probability of settlement. “For example, mandatory disclosure may be less susceptible to strategic manipulation, because discovery rules determine what is disclosed. Avoidance of strategic manipulation may itself tend to avoid divergent expectations, and therefore increase the probability of settlement.”).

¹⁷³. See id. (“Only empirical research can determine whether the primary incentive effects will dominate as we predict, or whether secondary effects will prove more powerful.”).

¹⁷⁴. See, e.g., Cooter & Rubinfeld, supra note 153, at 88. See also Issacharoff & Loewenstein, supra note 162, at 786.
with an extremely low probability of success that are initiated by the plaintiff in the hopes of obtaining a nuisance settlement. Starting with the proposition that the defendant normally bears more disclosure costs than the plaintiff, the argument is that the asymmetrical distribution of disclosure costs would greatly encourage the plaintiff to initiate a strike suit and use it as leverage to solicit an unjust settlement.\textsuperscript{175} The most important premise of this argument is that the defendant incurs more disclosure costs than the plaintiff.\textsuperscript{176} However, it is unclear where this proposition originated. This may be true where a citizen sues a big corporation, but it would be improper to generalize this to all civil cases.\textsuperscript{177}

Furthermore, even assuming that the defendant generally does bear more disclosure costs than the plaintiff, the predicted proliferation of strike suits is doubtful. The key is to realize that the scope of mandatory disclosure is not broader than the scope of the discovery rules.\textsuperscript{178} If there indeed exists an asymmetrical distribution of costs in disclosure, the same would also be true in discovery. Considering that the cost of making a discovery request normally is small, if the plaintiff is able to initiate a strike suit in the disclosure scheme, he would also be able to use this asymmetrical distribution as leverage to obtain a settlement in the discovery process. There seems to be no reason to believe that mandatory disclosure would produce more strike suits than discovery without disclosure would have. The point is that when considering the effects of mandatory disclosure on strike suits, it is essential to take the whole discovery process

\textsuperscript{175} See Cooter & Rubinfeld, \textit{supra} note 153, at 88. "Mandatory disclosure typically imposes greater demands on the parties to reveal information early in the litigation process. To the extent that the majority of disclosure is made by defendants at their own expense, and to the extent that the disclosure involves more than bare-bones responses (e.g., detailed information about the expert's opinions), the plaintiff faces a reduced cost of proceeding with a suit sufficiently far to obtain an accurate assessment of the suit's prospects." \textit{Id. See also} Issacharoff \& Loewenstein, \textit{supra} note 162, at 769 ("By imposing costs almost exclusively on the defendant and by providing sanctions for a lackluster provision of information, the new statute greatly increases the attractiveness of strike suits.")).

\textsuperscript{176} See \textit{supra} note 175.

\textsuperscript{177} For instance, in a situation where a doctor sues his patient for unpaid fees and the defendant raises an affirmative defense in the pleading (such as the plaintiff mistreated him and committed malpractice) it can be expected that the plaintiff will face heavier burdens than the defendant will.

into consideration. Accordingly, the argument that mandatory disclosure would encourage strike suits would be valid only if mandatory disclosure would systematically impose more additional costs on the defendant than on the plaintiff.

Even assuming that such an asymmetrical distribution of additional disclosure costs exists, strike suits will increase only if the asymmetrical distribution of additional discovery costs is substantial enough to allow the plaintiff to solicit a nuisance settlement. Taking into account that the extent and content of information required to be disclosed is essentially limited and most costs would have been incurred during discovery even without mandatory disclosure, any additional costs are not likely to be substantial enough to produce strike suits.

IV. Two Empirical Studies of Mandatory Disclosure

While many empirical studies have been conducted on the topic of discovery, because of the relatively short history of the mandatory disclosure rule, only two studies have addressed the issue of mandatory disclosure.179 The Rand report, the first of these studies, was based upon the data from Rand's previous studies on the Civil Justice Reform Act (CJRA) of 1990.180 The CJRA research mainly focused on the comparison between ten “pilot” district courts and ten “comparison” district courts to see the effect of different techniques of case management mandated by the CJRA.181 Mandatory early disclosure was one of the case management techniques implemented in some districts.182 At the behest of the Advisory Committee on Civil Rules, the Rand Institute conducted a further analysis of the effect of the different mandatory disclosure techniques and produced the Rand report.183

The second study, the FJC report, was based on empirical research conducted by the Federal Judicial Center.184 The pur-
pose of this research was to assess the effect of the 1993 amendment to the discovery rules, including mandatory disclosure.\(^{185}\) This research was also initiated at the request of the Advisory Committee, and its findings carried great weight in the Advisory Committee's proposed further amendment to the disclosure rule.\(^{186}\) After general observations of the two reports' respective research methodologies and major findings, this Article will comment on the validity of the two studies and their reliability as a basis for further amendment of the mandatory disclosure rule.

A. \textit{Rand Report}

1. \textit{Methodology}

The basic methodology of this report was to compare four different aspects of cases filed within twenty district courts, ten "pilot" district courts and ten "comparison" district courts that adopted different rules or policies on mandatory disclosure.\(^{187}\) The cases, filed in 1992-1993, were used to compare hours of lawyer work, time to disposition, attorney satisfaction, and attorney views on fairness. While only subjective opinions gathered from attorneys were used to evaluate attorney satisfaction and attorney views on fairness, the other two aspects did rest on objective criteria such as the attorney's actual working hours and the actual time which elapsed before case disposition.

Lawyer work was intended to be an index of litigation cost and purported to be "the best available measure of how case management affects litigation costs."\(^{188}\) The study observed both the number of work hours on the entire case and the number of work hours spent on discovery.\(^{189}\) However, the number of work hours spent on the entire case, as opposed to the number of hours spent on discovery, was considered to be a more accurate measure to test the influence of mandatory disclosure on litigation costs.\(^{190}\) The time to disposition was used to assess whether mandatory disclosure would facilitate or delay the res-
olution of cases.\textsuperscript{191} These two research observations, as measured by the objective criteria, should be reliable indicia of the effect of mandatory disclosure on litigation cost and time.

However, it is important to note that although the selected district courts had adopted some type of mandatory disclosure rule, none was identical to the disclosure requirements adopted by the 1993 FRCP amendment.\textsuperscript{192} Therefore, while this report is able to appraise the mandatory disclosure policy in a general scope, as cautioned in the report itself, the data should not be used to evaluate the current mandatory disclosure rule adopted in the 1993 amendment.\textsuperscript{193}

2. Major Findings

Before evaluating the four features of the comparison, the Rand report addressed the question of satellite litigation.\textsuperscript{194} Aimed at testing the criticism that mandatory disclosure would increase satellite litigation and motion practice, the Rand report found that it was extremely rare for one party to file a compliance motion when the opposing party arguably violated her disclosure obligation.\textsuperscript{195} It also found no evidence that any substantial increase of satellite litigation and motion practice occurred in those district courts adopting some type of mandatory disclosure.\textsuperscript{196}

With regard to lawyer work hours, the report found generally no significant statistical difference between cases with early disclosure activities and cases without.\textsuperscript{197} The same was true when the comparison was drawn between cases from district courts with a mandatory disclosure policy and cases from district courts without such a policy, irrespective of whether any mandatory disclosure did occur in a particular case.\textsuperscript{198} Both findings remain valid whether the measure was the total work hours or the work hours on discovery.\textsuperscript{199} Similarly, these obser-

\begin{itemize}
\item 191. See id.
\item 192. See RAND REPORT I, supra note 28, at 17.
\item 193. See id.
\item 194. See id.
\item 195. See id.
\item 196. See id. at 48.
\item 197. See RAND REPORT I, supra note 28, at 48.
\item 198. See id.
\item 199. See id.
\end{itemize}
vations survive when most different subsets of cases, such as stakes in dispute, complexity of the case, or difficulty of discovery, were tested.200

While two sets of cases were found to have fewer lawyer work hours, the report concluded that this did not present sufficient evidence to suggest that mandatory disclosure reduces the attorney work hours.201 The first set of cases reviewed was filed in the district courts with rules for "early mandatory disclosure of information bearing on both sides of the dispute."202 Since this finding was based upon only three observed district courts, the report expressed doubt on generalizing from this result.203 The second set of cases was filed in district courts having a voluntary disclosure policy.204 The report theorized that the decrease in lawyer work hours in these cases was due to the nature of the case rather than because of disclosure.205

Regarding time to disposition, the report again found that there was no statistically significant difference between those cases filed in the district courts with a voluntary mandatory disclosure policy and those cases filed in the district courts without such a policy.206 This result also held when the comparison was made between cases that had disclosure activities and cases that did not.207 In testing different subtypes of cases in terms of stakes, complexity, or discovery difficulty, the report reached the same conclusion.208

The report addressed two contrasting findings in reference to attorney satisfaction.209 In district courts which imposed a mandatory disclosure policy, attorney satisfaction was significantly lower.210 Attorney satisfaction was higher in the district courts which implemented a voluntary disclosure policy and the

200. See id. at 48-49.
201. See id.
203. See id. at 49.
204. See id.
205. See id. at 50. The report theorized that the cases were less contentious and, therefore, fewer work hours were needed. See id.
206. See id. at 50-51.
207. See RAND REPORT I, supra note 28, at 51.
208. See id.
209. See id.
210. See id. at 51.
attorneys chose to make such a disclosure.\textsuperscript{211} However, the report cautioned that this analysis might be the result of "selection bias."\textsuperscript{212}

With respect to attorney views on fairness, no significant statistical difference was found in any set of comparisons.\textsuperscript{213}

B. FJC Report

1. Methodology

The FJC report was based upon 1,178 responses to questionnaires distributed to 2,000 attorneys involved in 1,000 cases.\textsuperscript{214} The 1,000 cases were a sample of all general civil cases that were likely to have some discovery activities,\textsuperscript{215} and all of which were terminated in 86 district courts during 1996.\textsuperscript{216} The response rates from the district courts adopting the mandatory disclosure rules, from the district courts "opting-out" of the mandatory disclosure rules, and from the district courts with mixed rules were almost identical.\textsuperscript{217}

The most significant feature of this report is that the findings were squarely based on both the attorneys' subjective impressions about the particular case and upon their general opinions, rather than upon purely objective criteria.\textsuperscript{218} Although twelve topics concerning discovery were covered in the questionnaire, three topics are particularly relevant to the mandatory disclosure issue: (1) the frequency, the effects, and the problems of initial disclosure, (2) the frequency, the effects, and the problems of expert disclosure, and (3) the frequency and

\textsuperscript{211} See id. at 52.

\textsuperscript{212} See RAND REPORT I, supra note 28, at 52. ("[A]ttorneys on cases for which they voluntarily choose to disclose may be less contentious attorneys or may be on less contentious cases and hence more satisfied, but not necessarily because of the early disclosure.").

\textsuperscript{213} See id.

\textsuperscript{214} See FJC REPORT, supra note 29, at 57-79.

\textsuperscript{215} See id. at 57. The pool of cases from which the chosen cases were sampled excluded some types of cases that normally would not have any discovery activities, such as loan collection, prisoner, land condemnation, foreclosure, bankruptcy, drug-related property, forfeiture, social security, and asbestos product liability cases. See id.

\textsuperscript{216} See id.

\textsuperscript{217} See id. at 58.

\textsuperscript{218} See id.
the effects of the "meet-and-confer" requirement. 219 Since this Article does not discuss the issue of expert disclosure, only the first and third questions will be considered.

In investigating the effects of initial disclosure and the "meet-and-confer" requirement, the questionnaire focused on the following: overall litigation costs, time from filing to disposition, overall procedural fairness, and fairness of case outcome. 220 In addition, three other aspects were investigated concerning the effect of initial disclosure: prospects of settlement, the amount of discovery, and the number of discovery disputes. 221 With regard to the effect of the "meet-and-confer" requirement, its influence on a number of issues was also investigated. 222 These questions were comprehensive enough to cover most of the concerns pertaining to the impact of initial disclosure and the "meet-and-confer" requirement. However, the questionnaire provided only four responses for answering each question: "increased," "had no effect," "decreased," or "I can't say." 223 The results were shown in a table of simple cross-tabulation of different responses. 224 The report categorized the responses according to different types of cases, the stakes in dispute, and the complexity of those cases. 225

The Federal Judicial Center conducted further empirical research, using regression and survival analysis, to examine the relationship among different variables of interest. 226 The district courts' policy of initial disclosure was included as one of the explanatory variables tested against two dependent variables: total litigation costs and disposition time. 227 The report further stated that the information regarding the total litigation cost came from the attorneys' estimates and the information pertaining to the disposition time that was obtained from docket data. 228

219. See FJC REPORT, supra note 29, at 5-7.
220. See id. at 62, 64.
221. See id.
222. See id. at 62.
223. See id. at 62, 64.
224. See FJC REPORT, supra note 29, at 26.
225. See id. at 16-17.
226. See id. at 52.
227. See id.
228. See id. at 52-53.
2. **Major Findings**

The report concluded that "[i]nitial disclosure is being widely used and is apparently working as intended, increasing fairness and reducing costs and delays far more than decreasing fairness or increasing costs and delays. Attorneys reported that initial disclosure reduced litigation cost and time."\(^{229}\) However, a careful reading of the specific figures shown in the cross-tabulation table of the report reveals that this conclusion is somewhat overstated.\(^{230}\) A more accurate description of the research findings is that most attorneys did not think that initial disclosure had any effects.\(^{231}\) However, among those attorneys who thought initial disclosure had some effects, more believed that they were positive.\(^{232}\) The same is also true for the effects of the "meet-and-confer" requirement.\(^{233}\)

With regard to the frequency of initial disclosure, among the 886 attorneys who reported that any disclosure or discovery was involved in their cases, 58% said that initial disclosure was used in their cases.\(^{234}\) A more important finding was that among those cases involving initial disclosure, other discovery activities also took place in 89% of these cases.\(^{235}\) As concluded in the report, this finding indicated that "disclosure infrequently replaces discovery entirely."\(^{236}\)

Regarding the effects of initial disclosure, a majority of respondents believed that initial disclosure had no effect on time from filing to disposition (62%), overall procedural fairness (54%), fairness of case outcome (70%), prospect of settlement (59%), and number of discovery disputes (62%).\(^{237}\) Similarly, a plurality of responses indicated that initial disclosure had no effect on overall litigation expenses (45%) or the amount of discovery (47%).\(^{238}\) Among those reporting that there were some effects, the positive effects consistently outweighed the negative

\(^{229}\) *FJC Report*, supra note 29, at 2.
\(^{230}\) See id. at 26.
\(^{231}\) See id.
\(^{232}\) See id.
\(^{233}\) See id. at 32.
\(^{234}\) See *FJC Report*, supra note 29, at 23.
\(^{235}\) See id.
\(^{236}\) *Id.* at 23.
\(^{237}\) See id. at 26.
\(^{238}\) See id.
effects. In specific types of cases, the research found that the reported positive effects of initial disclosure are systematically lower in high-stake, high-complexity cases than in ordinary cases.

Dealing with the problems of initial disclosure, the report found that the most common problem was that disclosure was too brief or incomplete. In contrast to this finding, a more striking discovery was that satellite litigation was rarely ever reported, and only 6% cited the problem that disclosure occurred only after a motion or a court order. As to specific types of cases, the report again found that problems of initial disclosure were more likely to be reported in high-stake, high-complexity litigation.

A majority of responding attorneys believed that the “meet-and-confer” requirement had no effect on overall litigation expenses (54%), time from filing to disposition (62%), overall procedural fairness (61%), fairness of case outcome (73%), and number of issues (70%). A majority of those reporting an effect stated that the positive effects were greater.

All of the above findings were based upon the interviewed attorneys’ impressions about the sampled cases in which they were involved. When questioned about their general opinions on the discovery system, 44% of the 1,036 responding attorneys thought that adopting a uniform, nationwide rule requiring initial disclosure would reduce litigation costs without interfering

239. See FJC REPORT, supra note 29, at 26. The percentage of “increased” versus the percentage of “decreased” on every individual aspect was as follows: overall litigation expense (16% v. 39%), time from filing to disposition (7% v. 32%), overall procedural fairness (37% v. 9%), fairness of case outcome (25% v. 5%), prospects of settlement (36% v. 6%), amount of discovery (10% v. 43%), and number of discovery disputes (5% v. 33%). See id.
240. See id. at 26-27.
241. See id. at 27 (19% out of 517 respondents).
242. See id.
243. See id. at 28.
244. See FJC REPORT, supra note 29, at 32.
245. See id. at 32. The percentage of “increased” versus the percentage of “decreased” on different individual questions was as follows: overall litigation expense (17% v. 29%), time from filing to disposition (9% v. 29%), overall procedural fairness (33% v. 7%), fairness of case outcome (21% v. 5%), and number of issues (6% v. 24%). See id.
246. See id. at 32.
with fair case resolution. On the contrary, 31% believed that totally deleting the initial disclosure rule would achieve the same goal.

In this later analysis, it was found that initial disclosure does not correlate with the total litigation costs. However, it was observed that time to disposition was shorter in the cases with initial disclosure.

C. Evaluation of the Two Reports

These two reports can be compared and assessed regarding methodology, findings, and reliability as a basis for reforming mandatory disclosure. In terms of methodology, the criteria used in the Rand report were more objective than that used in the FJC report. In reference to findings, these two reports seemingly told the same story: the criticism that mandatory disclosure would promote satellite litigation was unfounded, and mandatory disclosure did not achieve the intended effects of saving litigation costs or facilitating case disposition. In regard to reliability, both reports had some deficiencies in accessing the effects of the mandatory disclosure rule.

With over 5,000 cases observed, the Rand report prominently adopted two objective criteria: (1) the attorney work hour as an index of the litigation costs, and (2) the actual docket data on time to disposition. Both of these questions undoubtedly posed the greatest concern and provided the best indicia of the effects of the mandatory disclosure rule. Consequently, the conclusion reached in the Rand report should be highly reliable. However, the cases studied were filed before the 1993 amendment came into effect, and none of the studied district courts adopted the same mandatory disclosure rule now implemented in Rule 26(a)(1). This limitation makes it doubtful whether the result of this report could be used to assess the ef-

247. See id.
248. See id. at 44.
249. See FJC REPORT, supra note 29, at 44.
250. See id. at 54-55.
251. See RAND REPORT I, supra note 28, at xviii.
252. See id.
253. Reducing costs and facilitating early disposition are two major goals of mandatory disclosure. See supra note 12 and accompanying text.
254. See RAND REPORT I, supra note 28, at 17.
fectiveness of the mandatory disclosure rules adopted by the 1993 amendment. As the report itself repeatedly cautioned, "we could not use our data to evaluate that revised rule" and "the 'empirical' story of the effect of Rule 26(a)(1) remains to be told."

The FJC report was based mainly on cases filed after the 1993 amendment and, therefore, its data should be more reliable for evaluating the effects of mandatory disclosure. However, because there existed a selection bias in the data, some adverse effects might not be reflected in the report. For example, cases that could have been disposed of without any disclosure or discovery were not considered. This omission cannot be ignored because mandatory disclosure is most likely to have adverse effects on these cases. Disclosure, according to Rule 26(a)(1), is mandated in all cases without regard to whether any discovery is necessary in the specific case. It is probable that most cases outside the study's coverage could have been disposed of without any discovery activity, but the parties were still forced to make initial disclosure. The attorneys for these cases would obviously report negative effects of mandatory disclosure, but they were systematically excluded from this research.

With regard to its methodology, the FJC report's finding was, for the most part, based on the responding attorney's opinion about the particular case. Compared with the empirical study based upon the docket data, this methodology has both advantages and disadvantages. The advantage is that the attorney could report some aspects of the case that are not shown in the docket data. On the other hand, there is a danger that the attorney's personal opinions and perceptions about mandatory disclosure may have affected his answer. For exam-

255. See id.
256. Id. at 49.
257. See id. at 57-59.
258. See supra Part V. A.2. for a discussion on systematic bias.
259. See supra Part V. A.2.
261. See FJC REPORT, supra note 29, at 58.
262. Certain aspects of the case cannot be proved by the docket data. Examples of the aspects that the attorneys can report are the actual litigation costs and their impression of overall fairness during the whole process.
ple, in the FJC report, the questionnaire posed the question “What effects did initial disclosure have on the named case[?]”263 In answering, the interviewed attorney was given the four options of “increased,” “had no effect,” “decreased,” and “I can’t say.”264 It was unclear what basis for comparison was to be used, and the report did not provide any guidance in this regard. Did the “effect” mean that it was to be compared with other cases the attorney handled? Was it to be compared with the anticipated course of the named case without initial disclosure? Was it to be compared by some other standard? Without some clear comparison basis and an objective criterion, the answer could be meaningless.

Perhaps perceiving this danger, the FJC report subsequently added a further analysis to test the effect of mandatory disclosure on litigation costs and time to disposition.265 This analysis contradicted the report’s previously overstated conclusion and showed that there is no correlation between mandatory disclosure and litigation costs.266 The report based its analysis on the docket data and indicated that initial disclosure reduced the time to disposition.267 This analysis of the effect of time to disposition is different from the empirical study conducted in this Article. Because the FJC report did not explain the details of its analysis, this Article cannot explore the reason for the difference.

Despite the respective limitations of the two reports, they seemingly reached the same findings on the effects of mandatory disclosure. Their consistent findings rebut both the opponents’ and proponents’ arguments. The reports illustrate that the opponents’ argument suggesting that mandatory disclosure may increase satellite litigation is unfounded.268 On the other hand, their findings also contradict the proponents’ contention that mandatory disclosure may decrease litigation costs and facilitate the disposition of cases.

263. FJC REPORT, supra note 29, at 64.
264. See id.
265. See id. at 52.
266. See id.
267. See id.
268. See discussion supra Part IV.
In an effort to supplement these two empirical studies, this Article reports independent empirical research to test the effects of the mandatory disclosure rule.

V. New Empirical Research—A Comparison Between Different Districts

A. Methodology

Compared with distributing questionnaires to practicing attorneys and collecting their opinions, a more convenient and more important objective method is to analyze the docket data of actual cases handled under different disclosure rules. This Article examines two questions in evaluating the effects of the mandatory disclosure rule: (1) whether mandatory disclosure reduces time to case disposition, and (2) whether mandatory disclosure affects the trial rate.

The importance of these two questions for evaluating the effectiveness of mandatory disclosure is apparent. Since facilitating early resolution of disputes is an important purpose of mandatory disclosure, comparison of time to case disposition in different district courts which have adopted different rules is a sound indicator of whether the mandatory disclosure rule drives the system in the desired direction. Studying the trial rate tests whether the mandatory disclosure rule, as asserted by some law and economics analysis, reduces the settlement rate. Finally, the two questions relate to the overall concern of litigation costs. Both time to case disposition and the method for case disposition are often indicia of litigation costs. The more time needed for case disposition, the more litigation costs mount for both the litigants, in particular, and the system in general. Consequently, cases disposed of by trial normally incur more expenses than those disposed of without trial. Therefore, an increasing trial rate systematically indicates that higher expenses are borne by the litigants and the judicial system.

In analyzing time to case disposition and trial rate, two models are used: a vertical comparison model and a horizontal comparison model. In the vertical model, a comparison is

269. See infra Table 1.
made among the district courts adopting the mandatory disclosure rule within the period “before opting-in” and “after opting-in” to the rule. This vertical model purports to observe (1) whether cases were resolved faster after the district courts adopted the mandatory disclosure rules, and (2) whether cases going to trial decreased. Since the Rand and FJC studies were limited to single time periods, they could not conduct a vertical analysis. In other words, all of their results could be attributed to inter-district differences and not the effect of the mandatory disclosure rules.

The horizontal model illustrates differences between the district courts that adopted mandatory disclosure and the district courts that “opted-out” of the rule. Additionally, district courts that “opted-out” of the mandatory disclosure rule but adopted the “meet-and-confer” requirement are distinguished. Consequently, in the horizontal model, the district courts that adopted the rule are compared with both the district courts that “opted-out” and the district courts that adopted only the “meet-and-confer” rule.

However, the horizontal comparison of district courts may be misleading since there could have been significant differences among the three different types of district courts before the mandatory disclosure rule came into play. These differences might stem from factors other than the district courts’ different disclosure rules. For example, the data might show that cases in the district courts adopting the mandatory disclosure rule were resolved in an average of 20 days faster than cases in the district courts “opting-out” of the rule. However, before the courts adopted the mandatory disclosure rule, cases were resolved on an average of 30 days faster than cases in the district courts which eventually “opted-out” of the mandatory disclosure rule. Thus, it may be that case disposition became relatively slower because the courts adopted the mandatory disclosure rule. Without taking this factor into consideration, it is easy to mistakenly attribute any distinctions among the three types of district courts to their different disclosure rules. In order to

270. See infra Table 1.
271. See infra Table 1.
272. See infra Table 1.
273. See infra Table 1.
eliminate this problem, it is essential to include a parallel model of horizontal comparison among these three types of district courts (before the mandatory disclosure rule was adopted) to determine if any differences had, in fact, existed beforehand. Accordingly, six types of district courts are studied, as shown in Table 1.274

1. The Data

The primary data used for this empirical research came from the computerized data gathered by the Administrative Office of the United States Courts.275 The data was then assembled by the Federal Judicial Center and disseminated by the Inter-University Consortium for Political and Social Research.276 It enables the study of the outcomes of all cases terminated in Federal Court.277 When a case terminates in Federal District Court, the clerk transmits to the Administrative Office a form containing information about the case.278 This transmission includes important information about all cases filed in the federal courts including when and where the case was filed, when and how the case was disposed of, how

274. The data reports which district courts adopted the mandatory disclosure rules, which district courts “opted-out,” which district courts adopted only the “meet-and-confer” rule, and when they adopted their respective rules. This data comes from the reports of the Federal Judicial Center. See DONNA STIENSTRA, IMPLEMENTATION OF DISCLOSURE IN UNITED STATES DISTRICT COURTS, WITH SPECIFIC ATTENTION TO COURTS’ RESPONSES TO SELECTED AMENDMENTS TO FEDERAL RULE OF CIVIL PROCEDURE 26 (Fed. J. Ctr. 1994, 1995, 1996, 1997, 1998). The “opt-in” district courts in Table 1 adopted the mandatory disclosure rule either by local rules or by general orders. The “opt-out” district courts not only did not adopt the mandatory disclosure rule, but also did not authorize the judges to order disclosure in specific cases. The “mixed” district courts neither adopted mandatory disclosure nor authorized judges to order disclosure, but instead adopted the “meet-and-confer” requirement in 26(f). See id.


276. See supra note 275.

277. See supra note 275.

278. See supra note 275.
Table 1: Comparison Model

<table>
<thead>
<tr>
<th>Horizontal Comparison</th>
<th>District courts opting in mandatory disclosure rule</th>
<th>District courts opting out of mandatory disclosure rule</th>
<th>District courts opting in “meet-and-confer” rule only</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(post-opt-in district courts)*</td>
<td>(post-opt-out district courts)**</td>
<td>(post-mixed district courts)***</td>
</tr>
<tr>
<td>Parallel horizontal comparison</td>
<td>District courts before opting in mandatory disclosure rule</td>
<td>District courts before opting out of mandatory disclosure rule</td>
<td>District courts before opting in “meet-and-confer” rule only</td>
</tr>
<tr>
<td></td>
<td>(pre-opt-in district courts)****</td>
<td>(pre-opt-out district courts)</td>
<td>(pre-mixed district courts)</td>
</tr>
</tbody>
</table>

↑ vertical comparison


The date within ( ) indicates when the district adopted the mandatory disclosure rule.


**** The three “pre” types of district courts are the “post” district courts before they adopted their stance on mandatory disclosure. The cases filed in these “pre” district courts include cases filed after 1/1/1990, but before the adopting date which varies among the district courts.

many days were taken to dispose of the case, and what type of case was involved. It is this information which was used in the following research and analyzed through certain statistical techniques.

This data was further adjusted in several ways. First, judicial caseload was included in the analysis. Since caseload obviously affects how fast a case proceeds in court, it is essential to account for this variable. Second, civil cases related to prisoners were excluded since these cases are significantly different from ordinary civil cases. Taking into account that such prisoner cases account for a substantial portion of civil cases, including these types of cases within the data might make a substantial difference that is not of concern to this study. Third, the data was limited to cases filed between 1990 and September 30, 1997 (the last day of available data entry). Most

279. See supra note 275.
district courts that "opted" into the mandatory disclosure rule made this decision between 1994 and 1995. Thus, the interval from 1990 to 1997 is sufficient to make a vertical comparison. Fourth, the data regarding which district courts chose to adopt, "opt out," or partially adopt the mandatory disclosure rule, and when they did so was also included. This established the six different types of district courts shown in Table 1.

2. The Censoring Problem

Because the data currently available from the Administrative Office ends with cases filed on or before September 30, 1997, there is no information available concerning the outcome of cases filed but not terminated before that date. With respect to the two questions of concern, these pending cases would cause systematic bias.

As to time to case disposition, cases filed later (closer to September 30, 1997) would have a shorter time to disposition than cases filed earlier for two reasons. First, the cases filed later are more likely to be pending on September 30, 1997. Therefore, no information about their time to case disposition would be available. However, later-filed cases with a final disposition would show a short duration because only those cases that proceeded quickly could be both filed and disposed of before September 30, 1997. Second, the earlier-filed cases are more likely to contain cases lasting a long time. The later-filed cases have not had as much time to last. These two factors tend to show that cases filed later were systematically disposed of more quickly than cases filed earlier. Without taking this problem into account, the vertical comparison shows that cases in the "post-opt-in" district courts proceeded significantly faster than cases in the "pre-opt-in" district courts. This could be mistakenly deemed as evidence of the success of the mandatory disclosure rule.

The data's systematic bias in this regard is shown in Table 2. It reports the mean time, in days, to dispose of a case, as well

as the number of cases used to compute the mean. The first two columns present the cases filed in all district courts, and the last two columns show the cases filed in the district courts that adopted the mandatory disclosure rule. This table clearly indicates that in later filing years, the time to case disposition systematically decreases. This tendency is true both in all district courts as well as in “opt-in” district courts. The obvious data censoring cautions us to control for its effect in our vertical comparison model.

Table 2: Mean days needed for case disposition

<table>
<thead>
<tr>
<th>Filing year</th>
<th>All district courts for all cases*</th>
<th>All district courts for cases without trial**</th>
<th>Opt– in district courts for all cases***</th>
<th>opt– in district courts for cases without trial****</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean days N</td>
<td>Mean days N</td>
<td>Mean days N</td>
<td>Mean days N</td>
</tr>
<tr>
<td>1990</td>
<td>360.67 (163,293)</td>
<td>349.95 (157,564)</td>
<td>370.97 (27,209)</td>
<td>356.54 (26,091)</td>
</tr>
<tr>
<td>1991</td>
<td>333.78 (173,034)</td>
<td>323.46 (167,436)</td>
<td>338.90 (27,687)</td>
<td>326.44 (26,696)</td>
</tr>
<tr>
<td>1992</td>
<td>318.36 (175,171)</td>
<td>308.94 (169,538)</td>
<td>321.73 (28,119)</td>
<td>309.88 (27,058)</td>
</tr>
<tr>
<td>1993</td>
<td>310.71 (168,177)</td>
<td>301.82 (162,979)</td>
<td>319.36 (27,806)</td>
<td>309.26 (26,817)</td>
</tr>
<tr>
<td>1994</td>
<td>295.26 (163,598)</td>
<td>287.77 (158,827)</td>
<td>302.99 (27,507)</td>
<td>294.10 (26,558)</td>
</tr>
<tr>
<td>1995</td>
<td>287.90 (167,636)</td>
<td>272.68 (163,189)</td>
<td>284.65 (32,630)</td>
<td>272.87 (31,838)</td>
</tr>
<tr>
<td>1996</td>
<td>285.71 (139,275)</td>
<td>183.74 (137,292)</td>
<td>198.07 (22,263)</td>
<td>196.01 (21,919)</td>
</tr>
<tr>
<td>1997</td>
<td>80.82 (46,641)</td>
<td>80.75 (46,478)</td>
<td>85.49 (7,502)</td>
<td>85.45 (7,469)</td>
</tr>
<tr>
<td>Total</td>
<td>303.80 (1,196,825)</td>
<td>280.91 (1,164,070)</td>
<td>293.45 (200,723)</td>
<td>283.70 (194,446)</td>
</tr>
</tbody>
</table>

* cases filed in all district courts and terminated by any method  
** cases filed in all district courts and terminated without trial  
*** cases filed in the district courts that opted into the mandatory disclosure rule and terminated by any method  
**** cases filed in the district courts that opted into the mandatory disclosure rule and terminated without trial  
***** the number within ( ) stands for the number of observations

Systematic bias also exists in the data with regard to the trial rate; the data would show that cases filed later are less likely to go to trial. Because the disposition time for cases going to trial is longer than the disposition time for cases terminated without trial, the cases filed later are less likely to be recorded as terminated by trial. Cases filed earlier are more likely to have enough time to go through the litigation process and to be recorded in the data as terminated by trial. Without taking this problem into consideration, it would, as a result, appear in the vertical comparison model that the “post-opt-in” cases are much less likely to go to trial than the “pre-opt-in” cases. Again, this misleading showing would be the result of the systematic bias caused by the problem of data censoring, rather than evidence that mandatory disclosure reduces the trial rate. Table 3 shows
the systematically biased results caused by the data being censored as of September 30, 1997. Although trial rates dramatically decrease over time, this effect may be attributable to the problems noted above.

Table 3: Trial rate

<table>
<thead>
<tr>
<th>Filing year</th>
<th>Trial rate for cases in all district courts</th>
<th>Trial rate for cases in opt-in district courts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>3.51%</td>
<td>4.11%</td>
</tr>
<tr>
<td>1991</td>
<td>3.24%</td>
<td>3.58%</td>
</tr>
<tr>
<td>1992</td>
<td>3.05%</td>
<td>3.77%</td>
</tr>
<tr>
<td>1993</td>
<td>3.09%</td>
<td>3.56%</td>
</tr>
<tr>
<td>1994</td>
<td>2.91%</td>
<td>3.45%</td>
</tr>
<tr>
<td>1995</td>
<td>2.40%</td>
<td>2.43%</td>
</tr>
<tr>
<td>1996</td>
<td>1.40%</td>
<td>1.55%</td>
</tr>
<tr>
<td>1997</td>
<td>0.35%</td>
<td>0.44%</td>
</tr>
<tr>
<td>Total</td>
<td>2.74%</td>
<td>3.13%</td>
</tr>
</tbody>
</table>

* the number of observations are the same as that shown in Table 2

In sum, the problem of data censoring affects both the question of whether mandatory disclosure facilitates the early resolution of disputes as well as the question of whether it has any effect on the trial rate. This is evident in that many court cases were still pending on September 30, 1997, at the end date of the data. There is nothing in the available data that indicates how these pending cases will be resolved or how long it will take them to terminate. The later the cases were filed, the more likely they were still pending on September 30, 1997. Table 4 shows the rate of cases pending during different filing years for the six different types of district courts. It should be noted that substantially different case pending rates do not only exist in the vertical model ("pre-opt-in" district courts versus "post-opt-in" district courts), but also in the horizontal model among the "post-opt-in," "post-opt-out," and "post-mixed" district courts. As discussed below, this study takes different approaches to eliminate the data-censoring problem's effect on the two questions.

B. Time to Disposition

The mandatory disclosure rule sought to expedite the litigation process by means of early exchange of core informa-
### Table 4: Pending rate

<table>
<thead>
<tr>
<th>Filing year</th>
<th>Pre-opt-in*</th>
<th>Post-opt-in</th>
<th>Pre-opt-out</th>
<th>Post-opt-out</th>
<th>Pre-mixed</th>
<th>Post-mixed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>0.18%**</td>
<td>#</td>
<td>0.17%</td>
<td>#</td>
<td>0.33%</td>
<td>#</td>
</tr>
<tr>
<td></td>
<td>(27,258)***</td>
<td>(0)</td>
<td>(4154)</td>
<td>(0)</td>
<td>(3292)</td>
<td>(0)</td>
</tr>
<tr>
<td>1991</td>
<td>0.26%</td>
<td>#</td>
<td>0.25%</td>
<td>#</td>
<td>0.65%</td>
<td>#</td>
</tr>
<tr>
<td></td>
<td>(27,744)</td>
<td>(0)</td>
<td>(4484)</td>
<td>(0)</td>
<td>(3242)</td>
<td>(0)</td>
</tr>
<tr>
<td>1992</td>
<td>0.39%</td>
<td>#</td>
<td>0.37%</td>
<td>#</td>
<td>1.03%</td>
<td>#</td>
</tr>
<tr>
<td></td>
<td>(28,228)</td>
<td>(0)</td>
<td>(4598)</td>
<td>(0)</td>
<td>(3382)</td>
<td>(0)</td>
</tr>
<tr>
<td>1993</td>
<td>0.98%</td>
<td>0.94%</td>
<td>1.51%</td>
<td>0%</td>
<td>2.18%</td>
<td>8.33%</td>
</tr>
<tr>
<td></td>
<td>(27,126)</td>
<td>(955)</td>
<td>(4479)</td>
<td>(42)</td>
<td>(3393)</td>
<td>(48)</td>
</tr>
<tr>
<td>1994</td>
<td>2.53%</td>
<td>3.29%</td>
<td>3.46%</td>
<td>4.27%</td>
<td>2.60%</td>
<td>6.94%</td>
</tr>
<tr>
<td></td>
<td>(5720)</td>
<td>(22677)</td>
<td>(1070)</td>
<td>(3212)</td>
<td>(1424)</td>
<td>(2161)</td>
</tr>
<tr>
<td>1995</td>
<td>15.18%</td>
<td>7.62%</td>
<td>#</td>
<td>10.06%</td>
<td>2.34%</td>
<td>13.56%</td>
</tr>
<tr>
<td></td>
<td>(112)</td>
<td>(35,218)</td>
<td>(0)</td>
<td>(3955)</td>
<td>(128)</td>
<td>(3524)</td>
</tr>
<tr>
<td>1996</td>
<td># ****</td>
<td>27.89%</td>
<td>#</td>
<td>28.50%</td>
<td>#</td>
<td>34.13%</td>
</tr>
<tr>
<td></td>
<td>(0)</td>
<td>(30,875)</td>
<td>(0)</td>
<td>(3263)</td>
<td>(0)</td>
<td>(3988)</td>
</tr>
<tr>
<td>1997</td>
<td>#</td>
<td>71.12%</td>
<td>#</td>
<td>72.51%</td>
<td>#</td>
<td>77.43%</td>
</tr>
<tr>
<td></td>
<td>(0)</td>
<td>(25,976)</td>
<td>(0)</td>
<td>(2641)</td>
<td>(0)</td>
<td>(3593)</td>
</tr>
</tbody>
</table>

* the six types of district courts here correspond to those shown in Table 1.
** the percentage stands for the fraction of cases filed in that particular year but not terminated before September 30, 1997.
*** the number within ( ) stands for the number of cases filed within particular district courts in a certain year.
**** "#" indicates that no cases were filed and therefore no percentage is shown in this table.

However, the data shows no such effect. On the contrary, the data tends to show that cases filed in the "post-opt-in" district courts proceeded more slowly than cases filed in the "post-opt-out" and "post-mixed" district courts.

Two time periods are used to analyze the impact of mandatory disclosure: first, the time to case disposition (the general time) and, second, the time to case disposition for cases disposed by settlement or pretrial disposition (the non-trial time). In evaluating the effects of mandatory disclosure on case duration, the non-trial time may be a better measure than the general time since mandatory disclosure primarily influences the pace of the discovery process, not the pace of trial. Nevertheless, it is still worth including the general time as a supplemental criterion to measure the effect of mandatory disclosure.

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282. See Appendix A at Regression 1-6.
283. See Appendix A at Regression 2-3.
284. Taking into account that this is notwithstanding whether or not the case went to trial.
1. *The General Time Criterion*

Before reporting the complicated statistical analysis, it is helpful for descriptive purposes to present a simple tabulation of case progress in the different types of district courts. After excluding all cases pending on September 30, 1997 (without accounting for caseload, case category, and filing year), Table 5 reports the percentage of all cases terminated within a certain number of days, with or without trial.

**Table 5: Percentage of cases terminated within certain days (excluding cases pending September 30, 1997)**

<table>
<thead>
<tr>
<th>Days of case disposition</th>
<th>Post-opt-in</th>
<th>Post-opt-out</th>
<th>Post-mixed</th>
<th>Pre-opt-in</th>
<th>Pre-opt-out</th>
<th>Pre-mixed</th>
</tr>
</thead>
<tbody>
<tr>
<td>180* days</td>
<td>47.96%**</td>
<td>46.62%</td>
<td>45.34%</td>
<td>37.66%</td>
<td>36.97%</td>
<td>31.94%</td>
</tr>
<tr>
<td>270 days</td>
<td>66.56%</td>
<td>62.06%</td>
<td>60.18%</td>
<td>51.97%</td>
<td>49.33%</td>
<td>44.95%</td>
</tr>
<tr>
<td>360 days</td>
<td>78.38%</td>
<td>73.25%</td>
<td>71.61%</td>
<td>64.01%</td>
<td>59.60%</td>
<td>55.45%</td>
</tr>
<tr>
<td>450 days</td>
<td>86.92%</td>
<td>81.54%</td>
<td>80.08%</td>
<td>73.70%</td>
<td>68.89%</td>
<td>64.61%</td>
</tr>
<tr>
<td>540 days</td>
<td>92.13%</td>
<td>87.67%</td>
<td>86.98%</td>
<td>81.01%</td>
<td>76.37%</td>
<td>72.54%</td>
</tr>
<tr>
<td>630 days</td>
<td>95.41%</td>
<td>92.56%</td>
<td>92.05%</td>
<td>86.16%</td>
<td>81.38%</td>
<td>79.02%</td>
</tr>
<tr>
<td>720 days</td>
<td>97.28%</td>
<td>95.58%</td>
<td>95.05%</td>
<td>89.74%</td>
<td>85.72%</td>
<td>83.75%</td>
</tr>
<tr>
<td>810 days</td>
<td>98.53%</td>
<td>97.56%</td>
<td>97.40%</td>
<td>92.42%</td>
<td>89.05%</td>
<td>87.53%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

* The number stands for the number of days within which the case was terminated.
** The percentage stands for the fraction of cases terminated within certain days in the particular type of district courts.

Table 5 shows that while more “post-opt-in” district courts were terminated in a shorter period of time than the “post-opt-out” district courts, the difference is not significantly great. Moreover, Table 5 shows that the difference between the “pre-opt-in” district courts and the “pre-opt-out” district courts existed before the mandatory disclosure issue came into play. For example, while 78.38% of all cases filed in the “post-opt-in” district courts were concluded within 360 days, 73.25% of all cases filed in the “post-opt-out” district courts were disposed of within the same number of days.285 However, a comparison between “pre-opt-in” cases and “pre-opt-out” cases indicates that this difference cannot be used as proof that mandatory disclosure facilitates case disposition since 64.01% of all cases filed in the “pre-opt-in” district courts and 59.60% of all cases filed in the “pre-

285. See supra Table 5.
mandated disclosure" district courts were terminated within 360 days.\textsuperscript{286} This result shows that other factors, besides the different district courts' positions on mandatory disclosure, contribute to this difference.

Similarly, the difference between the "pre-opt-in" cases and the "post-opt-in" cases (for example, from 73.70\% of all cases in the "pre-opt-in" district courts to 86.82\% of all cases in the "post-opt-in" district courts terminated within 450 days) also cannot be attributed to the adoption of mandatory disclosure in these district courts shortening case duration since the same difference exists between the "pre-opt-out" cases and the "post-opt-out" cases (from 68.89\% to 81.54\%).\textsuperscript{287} Therefore, the cases in the courts which do not adopt mandatory disclosure also go faster after the mandatory disclosure comes into play. The fact that the cases in the courts which adopt mandatory disclosure go faster cannot be proof of the success of mandatory disclosure. Some other factors control the result.

When viewed from a comparative perspective, Table 5 actually shows that mandatory disclosure does not have a significant effect on time to disposition. However, the above statistical analysis is too simple to be conclusive. Many important variables, such as caseload and case category, are not taken into consideration. Moreover, the censoring problem cannot be resolved by simply disregarding the cases that are still pending on September 30, 1997. These pending cases might be disposed of more quickly or slowly than the cases terminated before September 30, 1997 and would, therefore, significantly change the results shown in the Table 5. Consequently, a more sophisticated statistical technique is necessary to make an accurate analysis.

Two models are used to evaluate the effect of mandatory disclosure on time to disposition: the vertical comparison model and the horizontal comparison model. In both models, multiple regression can analyze the different duration of cases among district courts with different disclosure rules, accounting for dif-

\textsuperscript{286.} See supra Table 5.
\textsuperscript{287.} See supra Table 5.
different caseloads per judgeship and for case category at the same time.\textsuperscript{288}

In addition to multiple regression, two techniques handle the problem of data censoring. First, the censored-normal regression (a more sophisticated regression) is used to account for cases pending on September 30, 1997.\textsuperscript{289} This censored-normal regression is very useful, especially when the censoring rates among the districts are comparable. Since the case pending rates within the three district courts in the horizontal comparison model are similar in each filing year, the censored-normal regression alone would be able to handle the censoring effect in this model. In the vertical comparison model, however, there is significant divergence of case-pending rates between the “post-opt-in” district courts and the “pre-opt-in” district courts. Consequently, a second technique is necessary. In order to account for the effect of the filing year on the case pending rate and case duration, the filing year is used as an explanatory variable in the censored-normal regression.

In the vertical model, after accounting for caseload, case category, censoring data, and filing year, a censored-normal regression indicates that there is no statistically significant difference between the “pre-opt-in” district courts and the “post-opt-in” districts courts concerning case duration. Among the 231,889 cases observed in this test, the result shows that cases in the “post-opt-in” district courts are only 2.4 days faster than cases in the “pre-opt-in” district courts.\textsuperscript{290} This difference is not statistically significant (p-value=0.311). The regression results are reported in Appendix A as Regression 1.\textsuperscript{291}

The distinction between cases in the courts that adopted the “post-opt-in” rule and cases in the courts that adopted the

\textsuperscript{288} For a general introduction of multiple regression, see LAWRENCE C. HAMILTON, REGRESSION WITH GRAPHICS: A SECOND COURSE IN APPLIED STATISTICS (1992). For an introduction to using regression in comparing the time to case disposition between judge and jury trial, see Theodore Eisenberg & Kevin M. Clermont, Trial by Jury or Judge: Which is Speedier?, 79 JUDICATURE 176 (1996).

\textsuperscript{289} For utilizing censored-normal regression to handle the data censoring problem, see Theodore Eisenberg & Lynn M. LoPucki, Shopping for Judges: An Empirical Analysis of Venue Choice in Large Chapter 11 Reorganizations, 84 CORNELL L. REV. 967, 990 (1999).

\textsuperscript{290} See infra Appendix A at Regression 1.

\textsuperscript{291} See infra Appendix A at Regression 1.
"pre-opt-in" rule is represented by a dummy variable in the above regression. This tests only whether the intercept in the regression model changed after adoption of mandatory disclosure. There is a strong interaction between the dummy variable and the filing year variable; the "pre-opt-in" cases systematically have an earlier filing year than the "post-opt-in" cases. Therefore, a further test of the difference between the "post-opt-in" cases and the "pre-opt-in" cases includes the interaction effect of the dummy variable and the filing year variable in the regression model. This regression would show any change in the coefficient of filing year after mandatory disclosure and more effectively control for the introduction of mandatory disclosure. Table 6 reports the regression results.

Table 6: Result of censored-normal regression of pre-opt-in cases against post-opt-in cases

<table>
<thead>
<tr>
<th>Variables</th>
<th>coefficient</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post-opt-in*</td>
<td>-36244.84</td>
<td>.000</td>
</tr>
<tr>
<td>Filing year</td>
<td>-12.215</td>
<td>.000</td>
</tr>
<tr>
<td>Interaction**</td>
<td>18.175</td>
<td>.000</td>
</tr>
<tr>
<td>Constant</td>
<td>24672.7</td>
<td>.000</td>
</tr>
</tbody>
</table>

Number of cases: 231,889
Uncensored observations: 200,723
Right-censored observations: 31,166
Pseudo R²: .000

The interaction term's coefficient measures the difference over time between the "pre-opt-in" and "post-opt-in" cases. The positive and significant coefficient on the interaction term shows that the time to disposition tended to increase in the "opt-in" districts. In the "pre-opt-in" district courts, later-filed cases proceeded gradually faster, while in the "post-opt-in" district courts later-filed cases proceeded at a gradually slower rate. 292 This result tends to show that after the district courts adopted the mandatory disclosure rule, the average time to dis-

292. See supra Table 6.
position of a case increased. While the difference is statistically significant (p-value=0.000), because of the size of the increase, i.e., six days longer per year (after subtracting the negative intercept), this result may not warrant the conclusion that mandatory disclosure increases the time to case disposition. Nevertheless, it reinforces the result reached by the previous test. The speed of case disposition is not improved by the mandatory disclosure rule.

In the horizontal comparison model, a censored-normal regression, controlling for caseload, case category, and censoring data, leads to the same conclusion. A simple horizontal comparison between the “post-opt-in,” “post-opt-out,” and “post-mixed” district courts, with 142,128 cases observed, shows that the time to disposition in the “post-opt-in” district courts is 23 days shorter than in the “post-opt-out” district courts and is 50 days shorter than in the “post-mixed” district courts. However, as explained above, this difference alone does not conclusively show that the mandatory disclosure rule has been successful. It is possible that there is another variable between the three types of district courts, besides mandatory disclosure, that would account for this difference in time to disposition. Therefore, a parallel horizontal comparison is necessary to examine this possibility.

A parallel horizontal comparison between the “pre-opt-in,” “pre-opt-out,” and “pre-mixed” district courts rebuts the superficial result of the simple horizontal comparison. In this parallel comparison, with 149,833 cases observed, the time to case disposition in the “pre-opt-in” district courts is 62 days shorter than in the “pre-opt-out” district courts and is 86 days shorter than in the “pre-mixed” district courts. This parallel comparison reveals that even before the mandatory disclosure issue came into play, there were already differences in time to case disposition among these districts. Since this already existed, factors other than the mandatory disclosure rule must have led

293. See supra Table 6.
294. See infra Appendix A at Regression 2.
295. See discussion supra Part V.A.2.
296. See infra Appendix A at Regression 3.
297. See infra Appendix A at Regression 3.
298. See infra Appendix A at Regression 2-3.
to this difference. The regression results of the above two horizontal comparisons are reported in Appendix A as Regression 2 and Regression 3, respectively.

Viewed together, the two horizontal comparisons show that the advantage of the "pre-opt-in" district courts over the other two types of district courts, in terms of time to disposition, lessened after they adopted the mandatory disclosure rule (over "opt-out" district courts, from 62 days to 23 days; over mixed district courts, from 86 days to 50 days).299 The time to disposition became longer in these district courts after they adopted the mandatory disclosure rule. This result is consistent with the result observed in the vertical comparison model.300 Thus, in over 100,000 observed cases, no evidence shows that mandatory disclosure shortens the time to case disposition. On the contrary, the over-all data tends to indicate that cases proceeded slightly slower in the district courts that had adopted the mandatory disclosure rule.

2. The Non-trial Time Criterion

Another comparison focuses on cases terminated without a trial, either through settlement or through other pretrial dispositions. In evaluating the effects of the mandatory disclosure rule, this criterion is superior to the general time-to-disposition canon because it gives a more precise picture of how mandatory disclosure affects the pace of the pretrial process.

The same data-censoring problem existed in this test.301 Unfortunately, the censored-normal regression cannot be used here to resolve the problem because it is not clear whether those pending cases are going to be disposed by trial or otherwise. Therefore, there is insufficient information about the censored data, and, consequently, a different technique must be used here.

Because the later-filed cases shown in the data are only a small portion of cases and were terminated relatively faster, while the earlier-filed cases proceeded for a long time and are more likely to be shown in the data, the most effective way to

299. The number here means relative advantage, not the real day.
300. See infra Appendix A at Regression 1.
301. See discussion supra Part V.A.2.
eliminate this effect is to allow earlier-filed cases and later-filed cases to have the same time interval to be terminated and have the same chance to be recorded in the data. To implement this control, cases observed are limited to cases filed during 1993 and 1994 and the maximum time for case disposition is set at 1,000 days. This limitation enables every case filed on any day during 1993 and 1994 to have an equally long period of time to be terminated and the result completely reflected in the data. This restriction can effectively eliminate the systematic bias that earlier-filed cases will tend to have a longer case-disposition time because they started before September 30, 1997. Admittedly, this control will exclude the cases that took more than 1,000 days, which would ordinarily be relevant to this study, but there are sufficient reasons to believe that this exclusion would not bias the result. First, cases disposed within 1,000 days account for over 95% of all cases disposed without trial. Second, this exclusion is even-handedly conducted in all compared district courts. It seems highly unlikely that the different positions on the mandatory disclosure rule would result in particular district courts having more cases proceeding longer than 1,000 days. Therefore, excluding these cases will not prejudice this study.

With this limitation, the vertical comparison model, with 52,173 cases observed, shows that the time to case disposition in the “post-opt-in” district courts is only 1.8 days shorter than in the “pre-opt-in” district courts. More important, this difference is not statistically significant (p-value=0.341). This result indicates that there is no statistically meaningful shortening of the pretrial process after the district courts adopted the mandatory disclosure rule. The regression results are reported in Appendix A as Regression 4.

The basic horizontal comparison model, with 26,648 cases observed, shows that the time-to-case disposition in the “post-opt-in” district courts is 27 days shorter than in the “post-opt-out” district courts and 62 days shorter than in the “post-mixed”

302. See supra Table 5.
303. See infra Appendix A at Regression 4.
304. See infra Appendix A at Regression 4.
305. See infra Appendix A at Regression 4.
district courts.\footnote{306}{See infra Appendix A at Regression 5.} Again, this result does not, definitively, show that the mandatory disclosure rule works. It is still necessary to run the parallel horizontal comparison model.

In the parallel horizontal comparison model, the same 1,000-day limitation is imposed as in the previous study.\footnote{307}{See supra text accompanying notes 301-303.} However, in order to increase the number of cases observed, the data set includes cases filed before 1994 instead of only during 1993 and 1994. Therefore, the fact that these cases were filed earlier should not bias the result. With more cases observed in this model, it accurately reflects the situation within these district courts before the mandatory disclosure issue came into play. Accordingly, with 129,574 cases observed, the regression shows that the time-to-case disposition in the “pre-opt-in” district courts is 37 days shorter than in the “pre-opt-out” district courts and is 55 days shorter than in the “pre-mixed” district courts.\footnote{308}{See infra Appendix A at Regression 6.} These results indicate that, even before the district courts chose their respective positions on the mandatory disclosure issue, cases in the “opt-in” district courts proceeded faster than in the other two types of district courts.\footnote{309}{See infra Appendix A at Regression 6.} While there is some difference between the basic horizontal comparison model and the parallel horizontal model, the difference is not statistically significant.\footnote{310}{See infra Appendix A at Regression 5 and 6.} The regression results of the two horizontal comparisons are reported in Appendix A as Regression 5 and Regression 6.\footnote{311}{See infra Appendix A at Regression 5 and Regression 6.}

These results are consistent with the outcome reached with the vertical comparison model. They strengthen the finding observed above. In cases terminated without a trial, there is no evidence showing that mandatory disclosure shortens the time to disposition.

C. Trial rate

The trial rate referred to here refers to the percentage of cases terminated by either a jury verdict, directed verdict, or a
judge-trial judgment. This criterion is established to indicate how many cases were not terminated by settlement or other pretrial rulings and, therefore, entered into the trial process. In evaluating the effect of mandatory disclosure, "settlement rate" is a better criterion than "trial rate." However, because many cases that were actually terminated by settlement were recorded in the official data as being terminated by many other methods, it is not practical to sort out the 'real' settlement rate from the official data. Nevertheless, since the mandatory disclosure rule is not likely to affect the rate of dismissal by rulings on legal issues, the trial rate is still a valid indication of the settlement rate.

In testing the trial rate in both the vertical comparison model and in the horizontal comparison model, the target of interest is the probability that trial occurs. This requires a statistical model with a dichotomous variable, unlike the time to disposition, which is a continuous variable. Thus, the above regression techniques cannot be used. In addition, the data-censoring problem discussed above also exists in this trial rate comparison. The "survival time proportional hazard model" is a recognized statistical model used to predict the probability

312. The official data divides the methods of case disposition into nine categories including: (1) lack of jurisdiction, (2) other dismissal, (3) default judgment, (4) consent judgment, (5) pre-trial motion, (6) jury verdict, (7) directed verdict, (8) judge-trial judgment, and (9) others. The trial rate reported in this research includes the cases disposed of by jury verdict, directed verdict, and judge-trial judgment. For a description of the data, see 11 Administrative Office of the U.S. Courts, Guide to Judiciary Policies and Procedures transmittal 64, at II-18 to -28 (Mar. 1, 1985).

313. The goal of mandatory disclosure is to promote settlement. Moreover, the decrease of trial rate does not necessarily mean the increase of settlement rate because many cases may be disposed of by other means, such as summary judgement.

314. An example of this is found in other dismissals.

315. The rate of consent judgment reported in the official data does not reflect the actual settlement rate because many cases, while actually settled, are disposed of by the plaintiff's dismissal of the case and are hidden in the category of "other dismissals." There is no way to tell under the "other dismissal" category how many cases are dismissed without a settlement or how many cases are dismissed with a settlement. It would be a mistake to treat the category of consent judgment as the number of cases actually settled.

316. The technique of regression can only be used to deal with continuous variables and is not capable of accommodating a dichotomous variable. See generally Hamilton, supra note 288.

317. See discussion supra Part V.A.2.
of the occurrence of a particular event and to control the censored data. Among the several models within the survival time proportional hazard technique, the Cox model is the most appropriate one for our purpose. Since the event of interest in our comparison test is trial, trial is set as the failure event in the Cox proportional hazard model.

In the vertical comparison model, the Cox proportional hazard model shows that cases filed in the "pre-opt-in" district courts were only slightly more likely to go to trial than cases filed in the "post-opt-in" district courts (hazard ratio = 1.05). This difference is not statistically significant (p-value = 0.309). This result indicates that there has been no statistically significant change in the rate of cases going to trial since the district

318. See generally David G. Kleinbaum, Survival Analysis: A Self-Learning Text (1996). This model has been utilized to analyze the probability question with censored data in a different legal issue. See id. See also John Blume & Theodore Eisenberg, Judicial Politics, Death Penalty Appeals, and Case Selection: An Empirical Study, 72 S. Cal. L. Rev. 465, 492-99 (1999) (using the survival time proportional hazard model to observe the probability of grants of relief from death penalties).

319. For an introduction to the Cox proportional hazards model, see Kleinbaum, supra note 318, at 86. The Cox model is a popular mathematical device used for analyzing survival data. The focus is not only on the model form, but also on why the model is popular. See id. The Cox model also focuses on "the maximum likelihood estimation of the model parameters, the formula for the hazard ratio, how to obtain adjusted survival curves, and the meaning of the PH assumption." Id. Furthermore, three statistical objectives are typically considered: (1) test for significance, (2) point estimate of the effect, and (3) confidence interval for this effect. See id. at 90.

A key reason that the Cox model is popular and most appropriate for our uses is because "even though the baseline is not specified, reasonably good estimates of regression co-efficients, hazard ratios of interest, and adjusted survival curves can be obtained for a wide variety of data situations." Id. at 96. In other words, the results of the Cox model will closely "approximate the results for the correct parametric model." Id. Lastly, the Cox model uses more information and is especially favored when survival time information is available and there is censoring. See id. at 98.

320. For an explanation on how the Cox model works, see supra note 319.

321. The vertical comparison model entails 230,061 cases observed and controlling for caseload, case category, censored data, and filing year.

322. The hazard ratio is the index of the variable's effect on the probability of occurrence of the event of interest. A hazard ratio of 1 indicates that the variable ("pre-opt-in") has no effect at all. A hazard ratio of 10 means that the cases in the "pre-opt-in" district courts are ten times more likely than cases in the "post-opt-in" district courts to go to trial. A hazard ratio of 0.1 means that cases in the "pre-opt-in" district courts are one-tenth as likely to go to trial as cases in the "post-opt-in" district courts.
courts adopted the mandatory disclosure rule. The results of this Cox proportional hazard model are reported in Appendix B as Cox 1.

In the basic horizontal comparison model, with 140,985 cases observed and controlling for all of the factors mentioned above, the Cox proportional hazard model shows that cases filed in the "post-opt-out" district courts and in the "post-mixed" district courts were both slightly less likely to go to trial than cases filed in the "post-opt-in" district courts. Again, this observation alone does not prove that cases filed in the "post-opt-in" district courts are more likely to go to trial than cases filed in the other two types of district courts.

A parallel horizontal comparison reveals that before the mandatory disclosure issue came into play, cases filed in the "opt-in" district courts were more likely to go to trial. The Cox proportional hazard model shows that cases filed in the "pre-opt-out" district courts and in the "pre-mixed" district courts were also slightly less likely to go to trial than were cases filed in the "pre-opt-in" district courts, with a hazard ratio 0.63 and 0.64 respectively. Although there is some difference in the hazard ratio between the basic and the parallel horizontal comparison, the difference is too small to be statistically significant.

The results of the two horizontal comparison models confirm the results of the vertical comparison model. Both indicate that there is no statistically significant difference in the trial rate among different types of district courts. The results of the Cox model in the two horizontal comparisons are reported in Appendix B as Cox 2 and Cox 3.

In order to increase the reliability of the above conclusion, another testing model is used to examine the influence of

323. See infra Appendix B at Cox 2. The hazard ratio is 0.76 and 0.66, respectively. See id.
324. See discussion supra Part V.A.
325. See infra Appendix B at Cox 3. The parallel horizontal comparison entails 148,875 cases observed and all relevant factors controlled for. See id.
326. See infra Appendix B at Cox 3.
327. See infra Appendix B at Cox 3.
328. See infra Appendix B at Cox 1.
329. See infra Appendix B at Cox 1, 2, and 3.
330. See infra Appendix B at Cox 2 and 3.
MANDATORY DISCLOSURE

mandatory disclosure on the trial rate. The statistical model used here is the logistic regression. Logistic regression is another recognized technique for dichotomous data.\textsuperscript{331}

The drawback of using a logistic regression here is that it, alone, cannot handle the problem of data censoring. A possible control to compensate for this fact is to limit the cases observed to cases that are filed relatively early.\textsuperscript{332} The difficulty of utilizing this control in our data is that the time from the adoption of the mandatory disclosure rule until the ending date of the official data that is available for this study is not long enough to reduce the rate of pending cases to an insignificant level.\textsuperscript{333} As shown in Table 4, the pending rate for cases filed in 1994 in different types of districts ranges from 2.60% to 6.94%, while the average trial rate is only about 4%.\textsuperscript{334} On the other hand, limiting to those cases filed in 1993 poses the problem that the number of cases filed in the three “post” groups of districts is too small to make a meaningful statistical comparison.

In order to overcome this difficulty, a multiple-control approach is imposed in this analysis upon both the vertical and horizontal comparison models. The cases observed are limited to cases filed during 1993 and 1994 in order to ensure that the number of the cases is great enough to make a statistically meaningful observation. The cases observed are further restricted to cases which were terminated within 1,000 days in order to ensure that the pending rate would not bias the result. This control is not merely to discard the pending cases. It also drops the cases that were disposed of, by any method, after 1,000 days. In other words, this 1,000-day control even-handedly drops all cases that lasted over 1,000 days regardless of whether the cases were pending or not. In spite of dropping these extraordinarily long cases, the cases observed still account for over 95% of all cases filed during the two years, maintaining the statistical importance of this test.

\textsuperscript{331} See Hamilton, supra note 288, at 217-47.

\textsuperscript{332} This control has been used in some trial rate research with censored data. See Theodore Eisenberg & Henry S. Farber, The Litigious Plaintiff Hypothesis: Case Selection and Resolution, 28 Rand J. Econ. 92, 103-06 (1997).

\textsuperscript{333} See supra Table 4.

\textsuperscript{334} See supra Table 4.
Under the multiple-control approach utilized in the vertical comparison model, the logistic regression shows that there is no statistically significant difference, in terms of trial rate, between the cases filed in the "post-opt-in" and "pre-opt-in" district courts. The multiple control approach entails 51,561 cases observed and controls for caseload and case category. The same result is shown in the horizontal comparison model, where the logistic regression indicates that the trial rates in the different types of district courts are not significantly different. This supplemental testing method of logistic regression confirms the result obtained in the Cox proportional hazard model.

VI. Conclusion

In general, the empirical research in this Article, the Rand report, and the FJC report do not present any evidence that mandatory disclosure achieved its intended goals of expediting the disposition of cases and saving litigation costs.335 On the other hand, these empirical studies also show that the criticisms of mandatory disclosure, including proliferation of satellite litigation and frustration of settlements, are unfounded.336

In particular, the Rand report illustrates that mandatory disclosure neither increases the satellite litigation nor affects attorneys’ views on fairness.337 Additionally, the Rand report presents no evidence supporting the proposition that mandatory disclosure increases litigation costs or changes the time to case disposition.338 The FJC report further demonstrates that most attorneys do not think that initial disclosure has any significant effect.339 Among the minority of attorneys who think initial disclosure does have some effect, more attorneys believe that the effect was positive.340 The FJC report also reinforces the Rand report’s finding that mandatory disclosure does not proliferate satellite litigation.341

335. See discussion supra Parts IV and V.
336. See discussion supra Parts IV and V.
337. See discussion supra Parts IV.A.
338. See id.
339. See FJC REPORT, supra note 29 and accompanying text.
340. See supra note 231 and accompanying text.
341. See discussion supra Part IV.B.2.
The empirical research in this Article, based upon the docket data, shows that mandatory disclosure neither expedites the litigation process nor promotes the trial rate.\textsuperscript{342} Both the results of the vertical comparison and the horizontal comparison after the district courts adopted the mandatory disclosure rule indicate that cases proceeded relatively more slowly.\textsuperscript{343} The difference of time to disposition between the “pre-opt-in” district courts and the “post-opt-in” district courts, however, is small.\textsuperscript{344} In cases terminated without a trial, the analysis shows that there is no statistically significant change of time to disposition after the district courts adopted the mandatory disclosure rule.\textsuperscript{345} The Cox proportional hazard model, in both the vertical comparison and the horizontal comparison, reports that there is no statistically significant difference in trial rate among different types of district courts.\textsuperscript{346} The test of logistic regression reaches the same conclusion.\textsuperscript{347}

These empirical results are consistent with this Article’s analysis from both the traditional legal arguments and the law and economics perspective.\textsuperscript{348} Both the proponents and opponents of mandatory disclosure appear to overstate its advantages and disadvantages.\textsuperscript{349} An objective and appropriate description of the current mandatory disclosure rule is that it is a controversial device with no practical effects.

An important question remains unanswered by any empirical research: what is the effect of mandatory disclosure on cases that do not call for any discovery? The theoretical analysis provided in this Article suggests that it would cause systematic overproduction of unnecessary information and result in wasteful litigation costs,\textsuperscript{350} unless the parties agree to spare each other the trouble of disclosing unneeded information. Although there is no evidence showing parties cannot reach such an agreement under these circumstances, sound rulemaking cer-

\textsuperscript{342} See discussion supra Part V.
\textsuperscript{343} See discussion supra Part V.B.
\textsuperscript{344} See discussion supra Part V.B.
\textsuperscript{345} See discussion supra Part V.B.2.
\textsuperscript{346} See discussion supra Part V.C.
\textsuperscript{347} See discussion supra Part V.C.
\textsuperscript{348} See discussion supra Parts II and III.
\textsuperscript{349} See discussion supra Part I.
\textsuperscript{350} See discussion supra Part II.B.
tainly should not depend on the cooperation of the parties to avoid its adverse effects. From this perspective, the pending amendment that excludes certain types of cases, i.e., those unlikely to have any discovery at all, from the coverage of the mandatory disclosure rule seems to move in the right direction.

But why should the amendment not entirely eliminate such an ineffective rule altogether? Since mandatory disclosure brings no perceived benefits to the discovery process, a wise course would be to abolish this redundant device. Although it might be politically more feasible to narrow its application and save some embarrassment, facing the mistake and correcting it would certainly be more desirable.
Regression 1: censored-normal regression of vertical comparison

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>post-opt-in*</td>
<td>-.2.409</td>
<td>.311</td>
</tr>
<tr>
<td>caseloads</td>
<td>-.007</td>
<td>.165</td>
</tr>
<tr>
<td>filing year</td>
<td>-7.311</td>
<td>.000</td>
</tr>
<tr>
<td>[case category]**</td>
<td>omitted</td>
<td>omitted</td>
</tr>
<tr>
<td>constants</td>
<td>14777.1</td>
<td>.000</td>
</tr>
</tbody>
</table>

- number of cases           231,889
- uncensored observations  200,723
- right-censored observations 31,166
- pseudo R²                   .005

* dummy variable
** there are 85 variables accounting for case category which are unimportant for present purpose and therefore are omitted

Regression 2: censored-normal regression of basic horizontal comparison

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>post-opt-out*</td>
<td>22.891</td>
<td>.000</td>
</tr>
<tr>
<td>post-mixed*</td>
<td>50.147</td>
<td>.000</td>
</tr>
<tr>
<td>caseloads</td>
<td>-.052</td>
<td>.000</td>
</tr>
<tr>
<td>[case category]</td>
<td>omitted</td>
<td>omitted</td>
</tr>
<tr>
<td>constants</td>
<td>300.281</td>
<td>.209</td>
</tr>
</tbody>
</table>

- number of cases           142,128
- uncensored observations  103,450
- right-censored observations 38,678
- pseudo R²                   .008

* both are dummy variables
Regression 3: censored-normal regression of parallel horizontal comparison

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pre-opt-out*</td>
<td>62.302</td>
<td>.000</td>
</tr>
<tr>
<td>pre-mixed*</td>
<td>86.632</td>
<td>.000</td>
</tr>
<tr>
<td>caseloads</td>
<td>.117</td>
<td>.000</td>
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<tr>
<td>[case category]</td>
<td>omitted</td>
<td>omitted</td>
</tr>
<tr>
<td>constants</td>
<td>409.403</td>
<td>.203</td>
</tr>
</tbody>
</table>

- number of cases 149,833
- uncensored observations 148,869
- right-censored observations 964
- pseudo $R^2$ .005

* both are dummy variables

Regression 4: regression of vertical comparison

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pre-opt-out*</td>
<td>1.801</td>
<td>.341</td>
</tr>
<tr>
<td>caseloads</td>
<td>.007</td>
<td>.564</td>
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<tr>
<td>constants</td>
<td>277.793</td>
<td>.000</td>
</tr>
</tbody>
</table>

- number of cases 52,173
- adjusted $R^2$ .069

* dummy variable

Regression 5: regression of basic horizontal comparison

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>post-opt-out*</td>
<td>26.591</td>
<td>.000</td>
</tr>
<tr>
<td>post-mixed*</td>
<td>61.789</td>
<td>.000</td>
</tr>
<tr>
<td>caseloads</td>
<td>-.045</td>
<td>.032</td>
</tr>
<tr>
<td>constants</td>
<td>300.206</td>
<td>.000</td>
</tr>
</tbody>
</table>

- number of cases 26,648
- adjusted $R^2$ .074

* both are dummy variables
### Regression 6: regression of parallel horizontal comparison

The dependent variable is the mean days for case disposition.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pre-opt-out*</td>
<td>37.998</td>
<td>.000</td>
</tr>
<tr>
<td>pre-mixed*</td>
<td>55.036</td>
<td>.000</td>
</tr>
<tr>
<td>caseloads</td>
<td>.104</td>
<td>.000</td>
</tr>
<tr>
<td>caseloads</td>
<td>241.539</td>
<td>.000</td>
</tr>
</tbody>
</table>

- number of cases: 129,574
- Adjusted $R^2$: .074

*both are dummy variables
Appendix B

Cox 1: The Cox model of vertical comparison

<table>
<thead>
<tr>
<th>Variables</th>
<th>hazard ratio</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pre-opt-in*</td>
<td>1.049</td>
<td>.309</td>
</tr>
<tr>
<td>caseloads</td>
<td>-.999</td>
<td>.000</td>
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<tr>
<td>filing year</td>
<td>1.010</td>
<td>.378</td>
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<td>[case category]**</td>
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<td>omitted</td>
</tr>
</tbody>
</table>

Number of cases: 230,061

* DUMMY VARIABLE
** there are 85 variables accounting for case category which are unimportant for present purpose and therefore are omitted

Cox 2: The Cox model of basic horizontal comparison

<table>
<thead>
<tr>
<th>Variables</th>
<th>hazard ratio</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>post-opt-out*</td>
<td>.761</td>
<td>.000</td>
</tr>
<tr>
<td>post-mixed*</td>
<td>.660</td>
<td>.000</td>
</tr>
<tr>
<td>caseloads</td>
<td>.999</td>
<td>.000</td>
</tr>
<tr>
<td>filing year</td>
<td>.965</td>
<td>.196</td>
</tr>
<tr>
<td>[case category]</td>
<td>omitted</td>
<td>omitted</td>
</tr>
</tbody>
</table>

Number of cases: 140,985

* both are dummy variables

Cox 3: The Cox model of parallel horizontal comparison

<table>
<thead>
<tr>
<th>Variables</th>
<th>hazard ratio</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pre-opt-out*</td>
<td>.627</td>
<td>.000</td>
</tr>
<tr>
<td>pre-mixed*</td>
<td>.642</td>
<td>.000</td>
</tr>
<tr>
<td>caseloads</td>
<td>.999</td>
<td>.000</td>
</tr>
<tr>
<td>filing year</td>
<td>1.022</td>
<td>.053</td>
</tr>
<tr>
<td>[case category]</td>
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<td>omitted</td>
</tr>
</tbody>
</table>

Number of cases: 148,875

* both are dummy variables