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THE GOVERNMENT AS LITIGANT:
FURTHER TESTS OF THE CASE
SELECTION MODEL

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ABSTRACT

We develop a model of the plaintiff's decision to file a law suit that has implications for how differences between the federal government and private litigants and litigation translate into differences in trial rates and plaintiff win rates at trial. Our case selection model generates a set of predictions for relative trial rates and plaintiff win rates depending on the type of case and whether the government is defendant or plaintiff. In order to test the model, we use data on about 350,000 cases filed in federal district court between 1979 and 1997 in the areas of personal injury and job discrimination where the federal government and private parties work under roughly similar legal rules. We find broad support for the predictions of the model.

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1. Introduction

The process by which potential plaintiffs decide whether to pursue a claim by filing a lawsuit has important implications for case outcomes including the trial rate and the success rate at trial. In an earlier paper (Eisenberg and Farber), we develop and test a theory of case selection that predicts different trial rates and trial win rates for corporations and individuals based on hypothesized differences in the variance of their litigation costs. In this study, we provide a further test of the case selection model by extending our analysis to cases involving the United States as litigant, both as plaintiff and defendant.

Understanding federal government litigation is important in its own right because it comprises a substantial portion of the federal courts' business. Cases in which the United States' presence as a party formed a basis for federal jurisdiction accounted for 30.4 percent of the 4,290,117 federal civil nonbankruptcy cases terminated from fiscal 1979 to 1997 and for 16.5 percent of the 159,799 cases that terminated by judgment after trial. To the extent that government has distinctive characteristics as a litigant, comparison of its litigation patterns with those of private litigants provides an important empirical test of the case selection model.

In the next section, we describe the substantive areas where the legal standards governing cases with the United States and with private parties are similar: personal injury torts and job discrimination. Cases in these areas will form the basis of our empirical analysis.

In section 3, we develop a model of the plaintiff's decision to file a lawsuit (a case selection model) with implications for trial rates and plaintiff win rates at trial. The model

implies that trial rates will be inversely related to defendant costs and to the probability of defendant liability. The model also implies that the probability of a plaintiff win at trial is directly related to plaintiffs costs and to the probability of defendant liability and inversely related to defendants costs and the stakes of the case.

In sections 4 and 5, we discuss likely differences between the government and private parties as litigants in tort and job discrimination cases. While the basic legal standards governing tort and job discrimination cases are similar between the government and private parties, in sections 4 through 6 we note four differences: 1) the government has lower costs than do private parties as defendants in both tort and job discrimination cases, 2) the stakes are lower in both tort and job discrimination cases with the government as defendant relative to cases with private parties as defendant, 3) the government as plaintiff in job discrimination cases generally brings cases of higher quality (higher probability of liability) than do private plaintiffs, and 4) average litigation costs among private plaintiffs in job discrimination cases are lower the average government's litigation costs in the same role

The selection model developed in section 3 has clear implications for how these differences will affect case outcomes. We predict that the trial rate will be higher and the plaintiff win rate will be higher in cases where the government is defendant relative to cases with private defendants. We also predict that the trial rate will be lower and the plaintiff win rate will be higher in job discrimination cases where the government is plaintiff relative to job discrimination cases with private plaintiffs.

In section 6 we describe the data we use for the empirical analysis. These data, on about 350,000 cases filed in federal district court between 1979 and 1997 in the areas of personal injury and job discrimination, are derived from the Federal Integrated Court Database.

The results of the empirical analysis are contained in section 7. We find support for all of the predictions noted in the previous paragraph save one. The single anomalous result is that the plaintiff win rate in job discrimination cases with the government as defendant is lower than the plaintiff win rate in job discrimination cases with private defendants. The results confirm the need to consider the pre-filing selection process in interpreting post-filing patterns of case outcomes.

2. Subject Areas With Both Government and Private Litigants

Analyzing the government as litigant requires classes of cases that involve governments and private parties in the same roles. In addition, to allow for meaningful comparison, similar legal standards should govern private and government litigants and any differences in legal standards should have clear implications for the characteristics of cases filed. In general, litigation involving the United States is *not* typical of the mass of litigation. Cases initiated by the government include a massive number of highly successful, quickly resolved, collection actions.[1] Even non-collection contract litigation involving the government may differ from private litigation. A contract case against the government may not be fundamentally the same as a contract case against a private party. A whole subfield of government contract law exists.

At least two subject areas contain both government and private litigants and share governing legal standards: tort cases and job discrimination cases, and we restrict our analysis to case outcomes in these areas. In the remainder of this section, we outline the legal standards in these areas and note some clear differences between the laws governing private and government litigants. We will rely on these differences to generate most of the testable implications of the selection model for case outcomes.

Tort Cases

Federal court tort cases in which the federal government is the defendant are, under the Federal Tort Claims Act (FTCA), based on state law. The law of the state where the tort occurs governs the action, and the federal government is expressly made liable when a private party would be liable (28 U.S.C. secs. 1346(b), 2674). State substantive tort law also governs federal court tort cases in which the diverse residence of private parties is the basis for federal jurisdiction (*Erie Railroad Co. v. Tompkins*, 304 U.S. 64, 1938). Thus, the substantive law governing federal court tort actions against the federal government is substantially similar to the law governing federal court actions against private defendants.

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[1] For summary statistics about the large number of collection and enforcement actions in federal court, see Clermont and Eisenberg (1995:Appendix).

Differences in the law governing the two classes of tort actions do exist. Tort cases with a private defendant are tried in federal court in cases where there is diversity of residence. Diversity cases, unlike FTCA cases, are subject to a jurisdictional amount limitation. Unless the plaintiff's complaint alleges that at least $50,000 is in controversy, federal courts lack jurisdiction to hear diversity cases (28 U.S.C. sec. 1332(a)). This amount was increased from $10,000 in 1988 (Pub. L. 100-702, 102 Stat. 4642). And FTCA cases are subject to a requirement that plaintiffs first present their claims to the appropriate federal agency.[2] More substantively, the FTCA provides the United States with a defense, the discretionary function exception, that is not generally available in private tort litigation (28 U.S.C. sec. 2680(a)). And neither punitive damages nor jury trials are available against the United States under the FTCA (28 U.S.C. secs. 2402, 2674). We consider below the effect of these differences on expected case outcomes.

Job Discrimination Cases

Our second group of cases is job discrimination cases. The bulk of employment discrimination suits are brought under Title VII of the Civil Rights Act of 1964 and are brought in federal court.[3] Most of these cases involve private plaintiffs suing private defendants. In Title VII cases, however, the United States can be present on either side of the law suit. The Equal Employment Opportunity Commission may bring Title VII actions on behalf of private litigants (42 U.S.C. sec. 2000e-5(f)(1)) and the Attorney General may sue in cases involving a pattern or practice of intentional discrimination (42 U.S.C. sec. 2000e-6). Departments, agencies, and units of the United States may be, and often are, defendants in Title VII actions (42 U.S.C. sec. 2000e-16(c)).

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[2] 28 U.S.C. sec. 2675(a) states in part:
An action shall not be instituted upon a claim against the United States for money damages for injury or loss of property or personal injury or death caused by the negligent or wrongful act or omission of any employee of the Government while acting with in the scope of his office or employment, unless the claimant shall have first presented the claim to the appropriate Federal agency and his claim shall have been finally denied by the agency in writing and sent by certified or registered mail. The failure of an agency to make final disposition of a claim within six months after it is filed shall, at the option of the claimant any time thereafter, be deemed a final denial of the claim for purposes of this section.

[3] Passage of the Americans with Disabilities Act, 42 U.S.C. secs. 12101 et seq., may, over time, shift the makeup of filed job discrimination cases. Since, as discussed below, we limit the sample to cases filed in 1991 or earlier, ADA cases should have no effect on our analysis. The ADA was enacted on July 26, 1990, and became effective two years later. Pub. L. 101-336, sec. 108, 104 Stat. 328.

The substantive legal standards governing purely private Title VII litigation are the same as the legal standards that apply when the United States appears as a defendant (42 U.S.C. sec. 2000e-16(c), (d)). Thus, Title VII cases allow one to compare the government's behavior both as a plaintiff and as a defendant with the behavior of private parties.

Some differences between legal rules that apply to government and private litigants are again worth noting. Plaintiffs suing either private or government defendants for discrimination must first present their claims administratively. But the agencies to which complaints must be presented differ. Plaintiffs suing the United States must first present their claims to the decision-making federal agency or unit (42 U.S.C. sec. 2000e-16(c)). Plaintiffs suing private defendants must first present their claims to a state equal opportunity employment commission or to the EEOC (42 U.S.C. sec. 2000e-5).

A statute, 42 U.S.C. sec. 1981, under which one may sue private defendants for employment discrimination, is not available against the United States as an entity. During the period covered by this study, in cases of intentional discrimination, section 1981 provided a basis for blacks and other minorities, but not women, to seek compensatory and punitive damages and jury trials. These remedies were not available in Title VII actions against the United States (Eisenberg and Schwab, 1988a).[4] Section 1981 also has different procedural requirements than Title VII (Eisenberg and Schwab, 1988a:602 n.38). But available evidence suggests that differences between case outcomes in Title VII and section 1981 actions are minimal (Eisenberg and Schwab, 1988a:600).[5]

Once again, we consider below the effect of these differences on expected case outcomes.

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[4] The Civil Rights Act of 1991 extended the availability of compensatory damages and jury trials to women in intentional discrimination cases against both private and governmental defendants. 42 U.S.C. sec. 1981a(a)(1), (2), (c). Punitive damages are still not allowed against the government. 42 U.S.C. sec. 1981a(b)(1). The Civil Rights Act of 1991 was generally effective on Nov. 21, 1991, the date of Pub. L. No. 102-166's enactment, Pub. L. No. 102-166, sec. 402(a), and does not apply to cases arising before its enactment. *Landgraf v. USI Film Prods.*, 511 U.S. 244, 257, 1994.

[5] "Examining the outcome and procedural progress of section 1981 litigation reveals no distinctive pattern differentiating it from litigation under section 1983 and title VII."). This is likely because of the considerable overlap between section 1981 actions and title VII actions (Eisenberg and Schwab, 1988a:602-03).

3. Theoretical Framework

In our earlier work we developed a theoretical framework to examine the effect on suit outcomes of the selection of potential claims for litigation (Eisenberg and Farber). We extend that selection model here to consider its implications for the case outcomes given differences between the government and private parties as litigants. In this section, we develop a specific version of this model of the litigation process that includes specifications for the expected trial outcome, the negotiated settlement, and the probability of a trial. We then use these constructs to model the plaintiff's decision regarding whether to file a lawsuit.

The Basic Model of Case Selection

Consider a potential plaintiff's decision regarding whether or not to file a lawsuit. Without being specific about the information structure or timing of the litigation process, the suit has some expected value to the plaintiff, $E(V_p)$, as a function of the likelihood that the defendant would be found liable at trial (π), the expected damages that would be awarded at trial conditional on a finding of liability (D), and the costs to the plaintiff and defendant (C_p and C_d respectively) of litigation. More formally, the plaintiff's expected value of filing a suit is[6]

$$E(V_p) = V_p(\pi, D, C_p, C_d). \tag{1}$$

The potential plaintiff will file a lawsuit if and only if $E(V_p) \geq 0$.

The plaintiff's expected value of filing a lawsuit is a probability-of-trial weighted average of the expected outcome at trial and the negotiated outcome. This is

$$E(V_p) = PY_t + (1 - P)Y_n, \tag{2}$$

where P is the plaintiff's expectation about the probability of trial, Y_t is the plaintiff's expectation of the trial outcome should a trial occur, and Y_n is the plaintiff's expectation of the negotiated outcome should such an outcome occur. We assume for simplicity that

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[6] Depending on the information structure of the game, π, D, and/or C_d may not be known to the plaintiff, *ex ante*, and, if not known, will be represented by the parameters of some prior distribution.

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the plaintiff and defendant are risk neutral. Thus, the plaintiff's utility is Y_t from a trial outcome and Y_n from a negotiated outcome. The defendant's utility is $-Y_t$ from a trial outcome and $-Y_n$ from a negotiated outcome.

As a first step toward calculating the probability of trial, we derive the contract zone, which is the range of potential negotiated settlements that both parties prefer to a trial outcome. Suppose the parties have common expectations about the level of damages, D, but potentially divergent expectations about the likelihood of liability at trial. Let the plaintiff's and defendant's expected probability of liability be π_p and π_d respectively. These expectations can be written as

$$\pi_p = \pi + \theta_p \tag{3}$$

and

$$\pi_d = \pi + \theta_d, \tag{4}$$

where π is the common component of the probability of liability and θ_p and θ_d are the plaintiff's and defendant's idiosyncratic components of the expected probability of liability. The idiosyncratic components are assumed to have zero mean and to be uncorrelated with other characteristics.

The plaintiff expects a net value from trial of $\pi_p D - C_p$, and the plaintiff will accept no less than this as a negotiated settlement. Analogously, the defendant expects a net value from trial of $-\pi_d D - C_d$, and the defendant will pay no more than this as a negotiated settlement. Thus, the contract zone is defined by

$$\pi_p D - C_p \leq Y_n \leq \pi_d D + C_d, \tag{5}$$

and the size of the contract zone is

$$CZ = (\pi_d - \pi_p)D + (C_p + C_d)$$
$$= (\theta_d - \theta_p)D + (C_p + C_d). \tag{6}$$

Note that size of the contract zone does not depend on the common component of the probability of liability (π), but it is directly related to the difference between the defendant's and plaintiff's idiosyncratic components ($\theta_d - \theta_p$).

We assume that a necessary and sufficient condition for a negotiated settlement is that the size of the contract zone is weakly positive. Trial outcomes occur only when $CZ < 0$, and this happens only when expectations are relatively optimistic ($\pi_p > \pi_d$ or $\theta_p > \theta_d$). If expectations are identical or relatively pessimistic ($\pi_p \leq \pi_d$ or $\theta_p \leq \theta_d$), then positive aggregate costs are sufficient to guarantee $CZ \geq 0$ and a negotiated settlement.[7] It is clear from equation 6 that, for any degree of divergent expectations, higher total costs of disagreement ($C_p + C_d$) make it more likely that there will be a positive contract zone. This is a basis for the claim that higher costs of disagreement lead to more negotiated settlements and fewer disputes (trials).

The property of the model that a trial occurs if $CZ < 0$ can be used to derive the *ex ante* probability of trial from the plaintiff's perspective. The plaintiff knows π and its idiosyncratic factor (θ_p). We assume that the plaintiff does not know the defendant's idiosyncratic value (θ_d) but knows that θ_d is drawn from a distribution with cumulative distribution function $F(\cdot)$. The condition for a trial, $CZ < 0$, can be written, on rearrangement of equation 6, as

$$\theta_d < \theta_p - \frac{C_p + C_d}{D}, \tag{7}$$

so that the probability of a trial is

$$P = F\left(\theta_p - \frac{C_p + C_d}{D}\right). \tag{8}$$

This implies that trials are more likely where θ_p and D are higher and where C_p and C_d are lower.

The final quantity needed to compute $E(V_p)$ is the plaintiff's expectation of the negotiated outcome should such an outcome occur. In order to compute this expectation, a specific solution to the bargaining problem is required, and, as is commonly done in the applied economics literature on bargaining, we rely on the Nash solution.[8] Central to the

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[7] See Farber and Bazerman, 1987; Farber and Bazerman, 1989; and Farber and Katz, 1979 for discussions of divergent expectations as an explanation for disagreement.

[8] The solution to the Nash bargaining problem is the outcome that satisfies a set of four axioms (pareto optimality, symmetry, independence of irrelevant alternatives, and insensitivity to linear transformations of utility). See Nash, 1950. The general character of results is likely to be supported by the solution to a wide range of bargaining models.

Nash solution are the threat points of the parties. These are the payoffs to the parties in the event that they do not agree on a negotiated settlement, and they are expressed here as the expected trial outcome net of costs. If the parties do not agree on a negotiated settlement, the expected trial outcome is to award $\pi_p D$ to the plaintiff. This expected trial outcome yields a payoff to the plaintiff net of costs of $\pi_p D - C_p$ and yields a payoff to the defendant net of costs of $-\pi_p D - C_d$.[9] These expected payoffs from a trial outcome are the threat points of the Nash bargaining model.

In order to derive the Nash solution, first compute for each party the difference between the payoff from the negotiated settlement and the payoff at trial net of costs. The payoffs at trial net of costs are the threat point payoffs, and these differences are the net gains from a negotiated settlement relative to receiving the threat point payoffs. The Nash solution to the bargaining problem is derived as the value of Y_n that maximizes the product of the net gains from a negotiated settlement. This is

$$W = (Y_n - (\pi_p D - C_p)) \cdot (-Y_n - (-\pi_p D - C_d)). \tag{9}$$

The solution to this maximization problem yields a negotiated settlement of

$$
\begin{aligned}
Y_n &= \pi_p D + \frac{(C_d - C_p)}{2} \\
&= (\pi + \theta_p)D + \frac{(C_d - C_p)}{2},
\end{aligned} \tag{10}
$$

which is the negotiation payoff to the plaintiff. Note that Y_n is positively related to the expected trial outcome $((\pi + \theta)D$ and the defendant's costs (C_d) and negatively related to the plaintiff's costs (C_p).

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[9] Note that this using this payoff to the defendant in forming the plaintiff's expectation regarding the Nash solution to the bargaining problem implies that the potential plaintiff ignores any information there might be in the fact that the parties cannot agree on a negotiated settlement (i.e., that $CZ < 0$) and assumes that the defendant has the same probability of liability as the plaintiff (π_p). This was done to keep the mathematical exposition relatively clear. At least two alternatives to this assumption are possible. First, the plaintiff might realize in the event that no negotiated settlement is reached that expectations are sufficiently relatively optimistic to cause $CZ < 0$. This would mean that $\pi_d < \pi_p - \frac{C_p + C_d}{D}$ and would affect the plaintiff's expectation of the defendant's threat point. Second, the plaintiff might use the unconditional expectation of π_d based on $F(\cdot)$. Neither of these alternatives changes the basic character of the theoretical results.

Now consider the plaintiff's decision regarding whether to file a lawsuit in the case where the negotiated settlement is as defined in equation 10. In fact, there may not be a negotiated settlement, and the case may go to trial, yielding a net trial payoff to the plaintiff as noted above of

$$Y_t = \pi_p D - C_p$$
$$= (\pi + \theta_p)D - C_p. \tag{11}$$

This too is a positively related to the expected trial outcome and negatively related to the plaintiff's costs, but it is unrelated to the defendant's costs.

Using the Nash solution in equation 10 as the negotiated settlement and using the net trial payoff in equation 11, the plaintiff's expected value for the lawsuit is

$$E(V_p) = (1 - P)\left[\pi_p D + \frac{C_d - C_p}{2}\right] + P[\pi_p D - C_p],$$
$$= (\pi + \theta_p)D + \frac{C_d - C_p}{2} - P\frac{C_d + C_p}{2}. \tag{12}$$

Holding P fixed, it is straightforward to demonstrate, based on equation 12, that $E(V_p)$ is increasing in π, θ_p, D, and C_d and decreasing in C_p. However, the case characteristics (with the exception of π) affect P as well, and this makes it more difficult to sign their effects on $E(V_P)$. Specifically,

$$\frac{\partial E(V_p)}{\partial \theta_p} = D - \frac{\partial P}{\partial \theta_p}\left[\frac{C_d + C_p}{2}\right], \tag{13}$$

$$\frac{\partial E(V_p)}{\partial D} = \pi_p - \frac{\partial P}{\partial D}\left[\frac{C_d + C_p}{2}\right], \tag{14}$$

$$\frac{\partial E(V_p)}{\partial C_p} = -\frac{(1 + P)}{2} - \frac{\partial P}{\partial C_p}\left[\frac{C_d + C_p}{2}\right], \tag{15}$$

and

$$\frac{\partial E(V_p)}{\partial C_d} = \frac{(1 - P)}{2} - \frac{\partial P}{\partial C_d}\left[\frac{C_d + C_p}{2}\right]. \tag{16}$$

Since $\frac{\partial P}{\partial \theta_p}$ and $\frac{\partial P}{\partial D}$ are positive and $\frac{\partial P}{\partial C_p}$ and $\frac{\partial P}{\partial C_d}$ are negative, only $\frac{\partial E(V_p)}{\partial C_d}$ can be signed unambiguously (positive). The first-order effects of increases in π, θ_p and D are, not

surprisingly, positive as increasing the plaintiff's expected trial outcome increases the expected value of filing suit. But increasing the plaintiff's expected trial outcome (through an increase in θ_p or D) also increases the probability of trial, which has a negative effect on the expected value of filing suit. Similarly, the first-order effect of an increase in the plaintiff's costs is to decrease the expected value of filing suit, but the increase in plaintiff's costs decreases the probability of trial which has a positive effect on the expected value of filing suit. An increase in the defendant's costs has a positive first order effect on the plaintiff's expected value of filing suit that is reinforced by the implied decrease in the probability of trial.

We proceed using the reasonable assumption that the effects of the implied changes in the probability of trial are not sufficiently large to offset the first-order effects. This implies that the plaintiff's expected value from filing suit is increasing in π, θ_p, D, and C_d and decreasing in C_p. Thus, plaintiffs are more likely to file suit where π, θ_p, D, and C_d are higher and where C_p is lower.

Implications of the Model for Trial Rates

The data contain information for filed cases on whether or not the case was decided through a trial and whether or not the plaintiff won at trial.[10] Equation 8 expresses the *ex ante* probability of a trial from the plaintiff's perspective, P. However, from the analyst's perspective, the *ex post* probability of a trial in cases where a lawsuit has been filed is

$$T = Pr[(\pi_p - \pi_d)D - (C_p + C_d) > 0 | E(V_p) > 0]$$
$$= Pr[(\theta_p - \theta_d)D - (C_p + C_d) > 0 | E(V_p) > 0] \tag{17}$$

where $E(V_p)$ is defined in equation 12 as a function of π, θ_p, D, C_p, and C_p.

Without considering the systematic selection of cases for litigation, the probability of trial is unrelated to the common component of the probability of liability (π), positively related to the stakes (D), and negatively related to each party's costs of litigation (C_p and C_d). However, consideration of the selection process modifies these predictions.

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[10] More precisely, there is information on whether or not judgment was entered for the plaintiff after trial. We discuss below potential problems in interpreting this information as indicating a plaintiff win.

There is no direct effect of the common component of the probability of liability (π) on the probability of trial, but there is an indirect effect through the selection process. The plaintiff's expected value of filing suit $(E(V_p))$ is positively related to π. This implies that an increase in π will make it optimal to file suit in cases where the plaintiff's idiosyncratic information about the probability of liability (θ_p) is lower, where plaintiff's costs are higher, where defendant's costs are lower, and where the stakes are lower. With the exception of the decrease in defendant's costs all of these changes in the composition of cases filed imply that the trial rate will be lower where the common component of the probability of liability is higher.

The direct effect of the stakes (D) on the trial rate is positive, but the indirect effect through the case selection process offsets this to some extent. The plaintiff's expected value of filing suit $(E(V_p))$ is positively related to D. This implies that an increase in D will make it optimal to file suit in cases where the plaintiff's information about the probability of liability $(\pi$ and $\theta_p)$ are lower, where plaintiff's costs are higher, and where defendant's costs are lower. With the exception of the decrease in defendant's costs all of these selection-induced changes in the composition of cases filed imply that the trial rate will be lower where the stakes are higher, weakening the direct effect.

The direct effect of plaintiff's costs (C_p) on the trial rate is negative, but there is an offsetting effect through the case selection process. $E(V_p)$ is negatively related to C_p. This implies that an increase in C_p will make it optimal to file suit in cases where the plaintiff's information about the probability of liability $(\pi$ and $\theta_p)$ is more favorable, where the stakes are higher, and where defendant's costs are higher. With the exception of the increase in defendant's costs all of these selection-induced changes in the composition of cases filed imply that the trial rate will be higher where the plaintiff's costs of litigation are higher, weakening the direct effect.

The direct effect of defendant's costs (C_d) on the trial rate is negative, and the effect through the selection process reinforces the direct effect. $E(V_p)$ is positively related to C_d. This implies that an increase in C_d will make it optimal to file suit in cases where the plaintiff's information about the probability of liability $(\pi$ and $\theta_p)$ is less favorable, where the stakes are lower, and where plaintiff's costs are higher. All of these selection-induced

changes in the composition of cases filed imply that the trial rate will be lower where the defendant's costs of litigation are higher, reinforcing the direct effect.

The left panel of table 1 contains a summary of the predictions of the model with regard to the relationships between the trial rate and case characteristics. The predictions are unambiguously negative with regard to the effects of π and C_d on the trial rate. But there are not clear predictions with regard to the effects of D and C_p on trial rates because the direct and selection effects are offsetting. However, if we assume that the direct effects dominate, then the trial rate is positively related to D and negatively related to C_p.

Implications of the Model for Plaintiff Win Rates at Trial

The model has implications for how plaintiff win rates at trial vary with the parties' litigation costs through the case selection process. We represent the probability that the defendant is liable at trial as

$$\pi_t = \pi + \theta_t \tag{18}$$

where π is the common component of the probability of liability and θ_t is a random component with zero mean that is uncorrelated with case characteristics or with the plaintiff's or defendant's idiosyncratic component of the probability of liability (θ_p and θ_d). The observed win rate at trial is the expectation of π_t conditional on both case being filed and the case being decided at trial. This is

$$E(\pi_t) = E[\pi + \theta_t | E(V_p) > 0, (\theta_p - \theta_d)D - (C_p + C_d) > 0]$$
$$= E[\pi | E(V_p) > 0, (\theta_p - \theta_d)D - (C_p + C_d) > 0] \tag{19}$$

where the first conditioning event is that the claim is filed as a lawsuit and the second conditioning event is that the case was decided at trial. The second equality follows from the fact that θ_t has zero mean and is uncorrelated with case characteristics so that its conditional expectation is also zero. The probability of a trial (the second conditioning event) does not depend directly on the common information on the probability of liability (π). Thus, the effect of selection on case characteristics is due to the plaintiff's decision regarding whether to file a lawsuit. Case characteristics will affect the plaintiff win rate to the extent that they affect the distribution of π through the selection process.

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Higher values of plaintiff's costs imply that the minimum threshold value of π at which potential plaintiffs decide to file lawsuits will increase, *ceteris paribus*. Thus, plaintiff win rates at trial will be higher where plaintiff's costs are higher. Higher stakes and higher defendant's costs imply the opposite. The minimum threshold value of π at which potential plaintiffs decide to file lawsuits will decrease where the stakes or defendant costs are higher, *ceteris paribus*. Thus, plaintiff win rates at trial will be lower where the stakes or defendant's costs are higher. These predictions are summarized in the right hand panel of table 1.

One potential complication is that the expected outcome of the case (πD) may affect the costs of litigation. It may be optimal for the parties to spend more to pursue or defend high-expected outcome cases. Thus, there is a direct effect of the expected outcome on the case-selection decision, and there is an indirect effect through the costs. The indirect effect through the defendant's costs works in the same direction as the direct effect of the stakes. Higher expected outcomes and higher defendant costs yield a higher $E(V_p)$ which implies that potential plaintiffs will be more likely to file suit. But the indirect effect through the plaintiff's costs works in the opposite direction. Higher plaintiff's costs reduce the likelihood that the potential plaintiff will decide to file a suit. We assume that the direct effect dominates so that an increase in the expected stakes will never raise plaintiff's costs so much that the plaintiff becomes less likely to file suit.

Our analysis has implications for how case outcomes (trial rates and plaintiff win rates) with the federal government as a party differ from case outcomes with two private parties. These implications are derived from institutional and legal differences between cases with the two types of parties with regard to the probability of liability (π), the stakes of the case (D), and the litigation costs $(C_p$ and $C_d)$.

4. The Government as Defendant: Tort Claims

Consider a private plaintiff who is deciding whether or not to file suit in a particular case. This decision will be based on the value of $E(V_p)$ as described in equations 1 and 2. The difference between cases where the potential defendant is the government and where the potential defendant is a private party depends on how tort litigation with the

government and private parties differ with regard to litigation costs (C_d and C_p) and the components of expected damages (π and D).

With regard to defendants' costs, it is plausible that the government's defense costs are, on average, lower than those of private defendants in similar cases. The federal government, unlike many private defendants, has a standing corps of lawyers available to defend it in litigation. It need not retain counsel on an hourly or contingent basis to defend the action. Less tangible aspects of costs also point to the government having lower mean costs than private defendants. The government never faces bet-the-company cases which might reduce a private firm's taste for litigation. And the government, which need not trade in the private market, may have less concern about reputation than a private defendant. We thus believe that the government, on average (though not in every case), has lower litigation costs than do private defendants. Based on our selection model, as summarized in table 1, this suggests that the trial rate will be higher and plaintiff win rates will be higher in tort cases where the government is defendant relative to cases with a private party as defendant.

But the difference in costs is not the only contrast between cases with a private defendant and cases with the government as defendant. Earlier, we noted differences between the law governing FTCA cases against the United States and private diversity-based tort actions that can affect the components of expected damages. We address five differences in tort litigation: 1) a jurisdictional amount limitation, 2) punitive damages, 3) the availability of jury trial, 4) the discretionary function exception under the FTCA, and 5) exhaustion of remedies.

The jurisdictional amount limitation for diversity cases means that federal courts see a select group of state-law based personal injury tort cases. Only those cases with more than $50,000 ($10,000 prior to 1988) in controversy are eligible for federal litigation, thus limiting federal courts to big diversity cases. One thus expects federal court diversity cases to differ from the mass of tort cases in the amount at stake.[11] The low stakes cases are not

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[11] This turns out to be the case, with federal court diversity tort cases having much higher mean and median recoveries than tort cases adjudicated in state court, where there is no minimum-damage threshold. (Eisenberg et al., 1996:439). Tabulation of amounts awarded to winning plaintiffs in federal court also show somewhat higher mean and median awards in diversity cases relative to FTCA cases.

similarly trimmed in FTCA actions. Since there is no jurisdictional amount limitation in FTCA cases, a group of low stakes cases may be filed against the United States in federal court that cannot be filed against private parties accused of the same behavior. The inability to recover punitive damages further lowers the stakes in FTCA cases compared with diversity cases.[12]

It is not clear how the unavailability of jury trials against the United states affects the composition of cases filed relative to cases brought against private parties. It may be that the possibility of a jury trial leads plaintiffs to file cases with low probability of winning (π) but possibly high awards (D) in those cases they do win (e.g., Clermont and Eisenberg, 1992:1140-43; Salop and White:1018-19). The effect of this on expected returns (πD) is ambiguous.

Neither is it clear how the discretionary function defense available to the United States under the FTCA will affect the composition of cases. This defense embodies the principal that "it is not a tort to govern" and thus gives the government leeway to make the decisions necessary to govern without being subjected to tort liability when discretionary decisions do not work out.[13] On the one hand, this added defense available to the government may reduce the probability of a plaintiff win against the government compared to the probability of a plaintiff win against a private party. On the other hand, since private parties do not face the range of decisions that governments face, the discretionary function exception may narrow the differences in the subject matters of private and FTCA actions.[14]

Finally the requirement that plaintiffs in actions against the government exhaust administrative remedies before filing suit serves to narrow the difference between cases against the government under the FTCA and diversity cases against private parties. The exhaus-

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[12] Available data suggest, however, that punitive damages are very rarely awarded in personal injury tort litigation so the jurisdictional amount limitation is probably the dominant effect on stakes (Bureau of Justice Statistics, 1995:6; Daniels and Martin, 1995; Moller, 1996; Eisenberg et al., 1997:633-637).

[13] E.g, *Bergh v. Washington*, 585 P.2d 805, 812 (Wash. App. 1978) (concurring opinion).

[14] The discretionary function exception creates a rather fine line. Compare *Berkovitz v. United States*, 486 U.S. 531, 1988 (discretionary function exception did not protect United States in action based on allegedly wrongful licensing and release of vaccine) with *United States v. Gaubert*, 499 U.S. 315, 1991 (discretionary function exception may protect operational or management level decisions by regulatory bodies that became involved in the day-to-day operation of a savings and loan association).

tion of remedies requirement likely increases the costs of plaintiffs in government-defendant cases compared with the costs of plaintiffs in private-defendant cases.

Overall, our analysis of how the legal differences between suits filed against the government under the FTCA and diversity cases with private defendants concludes that cases filed against the government have, on average, lower defendant costs, lower stakes, and higher plaintiff's costs. Using the selection, model, summarized in table 1, the lower stakes and higher plaintiff's costs have ambiguous effects on the trial rate, but the lower defendant costs imply a higher trial rate in cases against the government. There is no such ambiguity regard to the plaintiff win rate at trial. The selection model predicts that the lower stakes, higher plaintiff's costs, and lower defendant costs will result in higher plaintiff win rates at trial where the government is defendant. These predictions are summarized in the first row of table 2.

5. The Government as Party in Job Discrimination Cases

The Government as Defendant

As in tort cases, we assume that the government's defense costs in job discrimination cases are, on average, lower than private defendants' costs. And, as before, this assumption forecasts higher trial rates in cases involving the U.S. as defendant and higher plaintiff win rates. It is again necessary to account for differences in legal rules applicable to government and private defendants.

Government and private defendants operate under somewhat different rules in job discrimination cases, though the differences are not as great as in tort cases. Perhaps the most important difference is the lack of an alternative statutory remedy against the United States for job discrimination. The alternative remedy against private parties for job discrimination, available under 42 U.S.C. sec. 1981, gave black plaintiffs a chance for compensatory and punitive damages against private defendants.[15] Since such damages are not available

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[15] After 1991, the Civil Rights Act of 1991 made such damages available to female plaintiffs suing private parties.

against the United States, the stakes (D) are lower in job discrimination cases with the government as defendant relative to private-defendant cases.trial rates.

Overall, we conclude from our analysis of how the legal differences between job discrimination suits filed against the government differ from job discrimination suits filed against private defendants that cases filed against the government have, on average, lower defendant costs and lower stakes. Using the selection, model, summarized in table 1, the lower stakes have ambiguous effects on the trial rate, but the lower defendant costs imply a higher trial rate in cases against the government. The model has a clear prediction with regard to the plaintiff win rate at trial. The selection model predicts that the lower stakes and lower defendant costs will result in higher plaintiff win rates at trial where the government is defendant. These predictions are summarized in the second row of table 2.

The Government As Plaintiff

Job discrimination is the only subject matter area for which we have data, for which both the government and private parties frequently appear as plaintiffs, and for which the law applicable to the government is substantially similar to the law applicable to private parties.[16] But there are differences.

Job discrimination cases in which the government appears as plaintiff have gone through an elaborate screening process. The Equal Employment Opportunity Commission (EEOC) chooses, from among the thousands of complaints filed with it, which complaints to convert to lawsuits brought in its own name. It is not clear to us that the government-as-plaintiff has lower mean financial costs than private job discrimination plaintiffs, but the decision to file suit likely differs between the EEOC and private plaintiffs. Presumably, the EEOC screens cases carefully and makes choices regarding litigation based on the economic merits of the case. But the class of individuals who bring job discrimination cases is dominated by people who have lost their jobs (Donohue and Siegelman, 1991:984). These private plaintiffs in job discrimination cases are, on average, those job-losers with the lowest costs

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[16] The other class of cases in which we study the government-as-defendant, personal injury tort cases, does not contain cases in which the government appears as plaintiff. The government does not suffer personal injuries in the way that private individuals do and so does not appear as a plaintiff in personal injury tort actions.

of litigation, where costs of litigation are defined broadly to include pecuniary as well as (perhaps negative) nonpecuniary costs.

On this basis, a crude characterization of the government's case selection process in job discrimination cases is that the government selects "high quality" cases, that is, cases with a relatively high probability of plaintiff victory (high π). In contrast, the case selection process of private plaintiffs in job discrimination cases is more likely to depend strongly on relatively low litigation costs (low C_p), often nonpecuniary, that come from the experience of a job loss.[17]

The selection model, summarized in table 1, implies that the higher value of π in discrimination cases brought by the government will result in a lower trial rate. The higher effective costs to the government as plaintiff has a negative direct effect on the trial rate that is offset to some extent by a positive selection effect. The higher values of π and of C_p both imply unambiguously higher plaintiff win rates at trial. These predictions are summarized in the last row of table 2.

6. The Data

The data used here were gathered by the Administrative Office of the United States Courts.[18] When any civil case terminates in federal district court, the court clerk transmits a form to the Administrative Office containing information about the case. The form includes data regarding the subject matter of the case, removal status, the amount demanded, the dates of filing and termination, the procedural progress of the case at termination, the method of disposition and, when a judgment was entered, who prevailed and any amount awarded in damages. The form distinguishes among many subject matter categories, including branches of contract, tort, and other areas of law. The form distinguishes among several areas of personal injury tort law. It also contains a category labeled job discrimination that includes Title VII cases, section 1981 cases, and cases from other branches of antidiscrimination employment law.

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[17] In other areas of law, plaintiffs in employment cases also fare unusually poorly (Hillman, 1998:583, 591-93).

[18] For a fuller description of the database, see Clermont and Eisenberg, 1992:1133-34.

For present purposes, a key aspect of the data is that it indicates the jurisdictional basis for each case's presence in federal court. Four bases of federal jurisdiction are relevant: (1) the United States is a plaintiff, (2) the United States is a defendant, (3) the case involves a federal question, one arising under the Constitution or laws of the United States, and (4) the case arises under state law but involves parties who are citizens of different states, the so-called diversity jurisdiction.

By using the subject matter of the cases and the basis for jurisdiction we can identify personal injury tort cases against the United States and personal injury tort cases based on diversity jurisdiction. Further, we can distinguish job discrimination cases brought by and against the United States from job discrimination cases brought by and against other parties.[19]

We create two samples from these data. Our first sample contains all personal injury cases filed in federal court between July 1, 1979 and September 30, 1997 because of diversity jurisdiction or with the government as defendant. This sample contains 418,853 cases, comprised of 368,567 diversity cases and 50,836 cases with government as defendant. Our second sample contains all job discrimination cases filed in federal court over the same period. This sample contains 205,368 cases, comprised of 182,327 cases with involving only private parties, 15,680 cases with the government as defendant, and 7,361 cases with the federal government as plaintiff.

Since our data end with the close of the 1997 federal government fiscal year, we have no data on case progress after September 30, 1997. Thus, any cases not resolved by that date are censored in the sense that their outcomes are not observed. Of the 418,953 personal injury cases filed between July 1979 and September 1997, 365,577 were resolved and 53,376 were not resolved in time for the resolution to be recorded in our data. Of the 205,368 job discrimination cases filed between July 1979 and September 1997, 177,957 were resolved

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[19] A portion, presumably small, of the job discrimination cases treated here as private-defendant cases are in fact filed against state governments and we have no way to separate those cases out. 42 U.S.C. sec. 2000e(a).

The tort cases we consider do not include actions against states. The Eleventh Amendment prohibits state-law based tort actions from being brought against states in federal court. See *Welch v. State Dep't of Highways and Public Transportation*, 483 U.S. 468, 1987 (Jones Act); *Florida Dep't of State v. Treasure Salvors, Inc.*, 458 U.S. 670, 1982 (admiralty cases).

and 27,411 were not resolved in time for the resolution to be recorded in our data. This censoring is an important statistical problem in the analysis of trial rates and outcomes because cases that proceed to trial are likely to take substantially longer to resolve than cases that are dropped or settled without a trial verdict. Thus, tried cases will be censored disproportionately.

Table 3 shows the number of cases in our sample filed in each calendar year by category of case.[20] Table 3 also shows the fraction of cases pending as of September 30, 1997 by year of filing. Overall, about 13 percent of cases in our samples are censored, and it is clear that cases filed more recently are much more likely to be censored.

That this censoring is an important problem is apparent from the tabulations of the fraction of cases tried by year of filing contained in table 3. This fraction is computed as the fraction of resolved cases where there was a trial verdict. The trial rate computed this way falls dramatically with the year of filing. It is doubtful that this represents a real decline in trial rates. It is almost surely an artifact of the decline in time until the censoring date with year of filing and the concomitant lack of time for cases that will ultimately be tried to reach a trial verdict.

A straightforward approach to the censoring problem is to use only cases filed long enough before 1997 so that the censoring problem is minimal.[21] However, the overall trial rate is less than six percent for personal injury cases and less than nine percent for job discrimination cases (though this is a somewhat downward biased estimate given the censoring). Even a small amount of censoring is likely to seriously affect estimates of the trial rate. Thus, the fact that 5.5 percent of personal injury cases filed in 1992 are unresolved make even this year unsuitable for the analysis of trial rates. The fraction

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[20] The number of cases filed in 1979 is about half of the number in the immediately succeeding years because we have no data on cases filed prior to July 1, 1979. Similarly, the number of cases filed in 1997 is about 3/4 the number of cases filed in the immediately preceding years because we have no data on cases filed after September 30, 1997.

[21] In our earlier work, we developed a number of parametric statistical models that accounted for the censoring (Eisenberg and Farber: S103-S106). These models relied on strong parametric assumptions, but we were restricted to using data on cases filed from 1986-1994 and closed by September 30, 1994. Given the relatively smaller sample size, it was not feasible to drop cases filed in the latter part of the sample period. The longer time period used here makes it feasible to drop cases filed in the later years while preserving adequate sample sizes.

of personal injury cases that are unresolved (the censoring rate) falls to 0.15 percent for cases filed in 1991. Thus, we limit our analysis of personal injury cases to cases filed in 1979-1991 that were resolved by September 30, 1997 in order to be reasonably sure that censoring is not be a significant problem.[22] The censoring rate falls off more gradually for job discrimination cases. The censoring rate is 1.66 percent for job discrimination cases filed in 1993, 0.72 percent for cases filed in 1992, and 0.33 percent for cases filed in 1991. We also limit our analysis of job discrimination cases to cases filed 1979-1991 that were resolved by September 30, 1997.[23]

While measuring the trial rate is straightforward, determining or even defining who wins at trial is not. The data are fairly limited on this question, and we define a party as winning if a judgment was entered for that party. The central problem with this measure is that just because a judgment was entered for a particular party does not mean that the party, in fact, "won". For example, a plaintiff who files suit expecting a substantial damage award may settle for or receive at trial a very small damage award. This case would be recorded as a judgment for the plaintiff, and we call this a plaintiff win. But the plaintiff might perceive this as a loss. It is also the case that information on the identity of the party for whom judgment was entered is missing in 7.4 percent of the cases with trial outcomes.[24]

The data record the broad legal category of each case. Table 4 lists these categories and shows 1) the number of cases in each category in our sample, 2) the rate at which cases in each category are resolved at trial, and 3) the rate at which cases ending in trial judgments are won by plaintiffs. By far the largest categories of personal injury cases are "motor vehicle" and "other PI". Additionally, "asbestos" and "PI product liability" are large case categories. There is significant variation in the level of government involvement

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[22] Of the 246,048 personal injury cases filed between 1979 and 1991, only 337 (0.14 percent) were censored as of September 30, 1997.

[23] Of the 102,358 job discrimination cases filed between 1979 and 1991, only 87 (0.08 percent) were censored as of September 30, 1997.

[24] A portion (about 30 percent) of the cases we code as missing had a judgment entered for both parties. The missing data problem is much more severe in cases resolved without a trial verdict, where 83 percent are missing information on the identity of the party for whom a judgment was entered. Presumably, these are largely cases that are dropped or settled without having a formal judgment entered in court.

across legal categories, ranging from a low of 0.3 percent of asbestos cases having the federal government as defendant to a high of 40.6 percent of medical PI cases having the federal government as defendant. There is also a substantial difference in trial rates across categories with the highest trial rates in "medical PI" and the lowest trial rates in "asbestos". Plaintiff win rates at trial vary substantially across personal injury case categories, from a low of 28.7 percent in "PI product liability" to a high of 68 percent in "asbestos" cases. Plaintiff win rates in job discrimination cases are quite low at 25.5 percent.

7. Empirical Results

Trial Rates - Government as Defendant

Table 5 contains tabulations of trial rates by party identity and case category. As a benchmark, the first column of the table contains the trial rate for each case category for cases with private defendants. The second column contains the trial rates by case category for cases with the government as defendant. The prediction of the case selection model, summarized in tables 1 and 2, for both personal injury and job discrimination cases is that trial rates will be higher in cases with the government as defendant, and the tabulations are consistent with this prediction. The third column of the table contains the difference in trial rates between cases with the government as defendant and cases with private defendants. Overall, trial rates are 4.2 percentage points higher in personal injury cases with the government as defendant ($p < 0.0005$) and 1.2 percentage points higher in job discrimination cases with the government as defendant ($p = 0.001$). Within the personal injury cases, the trial rates are higher in cases with the government as defendant in all case categories save one (assault, libel, slander), and the differences are statistically significant at conventional levels in all but two categories (asbestos and PI product liability).[25]

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[25] The "assault, libel, slander" category is conceptually awkward because it lumps together quite different torts. Furthermore, assault cases may well be qualitatively different as between government and private defendants. Assaults involving government defendants have civil rights overtones that are lacking in assault cases involving private defendants. However, we expect that most assault cases involving government officials would appear in the Administrative Office Data's civil rights categories, not its tort categories.

It is possible that the mix of personal injury cases differs for private and government defendants. Trial rates are known to differ across categories of personal injury tort cases. For example, medical malpractice cases have high trial rates compared to all other classes of personal injury tort cases (Eisenberg et al., 1996). This is true for both state and federal court cases. However, it is unlikely that the difference in trial rates for the aggregated personal injury category is the result of a different mix of personal injury cases being filed against government and private defendants because the trial rates in virtually every category are higher for cases with the government as defendant.

Potentially more important is the possibility that the mix of cases and outcomes has varied over time or varies systematically across district courts in ways make it appear that the trial rate is higher in cases with the government as defendant. In order to investigate these possibilities, we estimated linear probability models of the probability of a trial that include fixed effects for case category (8 categories for personal injury, 1 category for job discrimination), year of filing (13 categories), and federal court district (91 categories). These results are contained in tables 6 and 7.

Based on the estimates in table 6, the raw 4.2 percentage point difference in trial rates in personal injury cases is reduced by almost half (to 2.3 percentage points) controlling for case category. Controlling for year of filing alone reduces the difference from 4.2 points to 3.4 points, but controlling for the district court actually slightly increases the difference from 4.2 points to 4.6 points. Overall, controlling for case category, filing year, and district court reduces the raw difference from 4.2 points to 2.8 points. This difference remains strongly statistically significant and is consistent with the prediction of our model.

Similar estimates for job discrimination cases are contained in table 7. The raw difference of 1.2 percentage points is not affected significantly by the inclusion of the control variables. Controlling for filing year and district court increases the point estimate of the raw difference from 1.2 points to 1.6 points. Once again, this difference remains strongly statistically significant and is consistent with the prediction of our model.

Trial Rates - Government as Plaintiff

Our analysis of the government as plaintiff focuses only on job discrimination cases. The entry in the fourth column of table 5 contains the trial rate for job discrimination cases with the government as plaintiff. The prediction of the case selection model for job discrimination cases is that trial rates will be lower in cases with the government as plaintiff, and the tabulations are consistent with this prediction. The fifth column of the table contains the difference in trial rates between cases with the government as plaintiff and cases with private plaintiffs. Trial rates are 4.5 percentage points lower in job discrimination cases with the government as plaintiff ($p < 0.0005$).

Once again, in order to consider the role of filing year and federal court district, we estimated linear probability models of the probability of a trial verdict that include fixed effects in these dimensions. These estimates are contained in table 8. The raw difference of -4.5 percentage points is reduced slightly by the inclusion of the control variables. Controlling for filing year alone reduces the magnitude of the point estimate of the raw difference from -4.5 points to -3.8 points. Controlling for court district alone has no effect on the point estimate of the raw difference, but controlling for both filing year and court district reduces the point estimate from -4.5 to -3.6 points. This difference remains strongly statistically significant and is consistent with the prediction of our model.

Plaintiff Win Rates - Government as Defendant

Table 9 contains tabulations of plaintiff win rates at trial by party identity and case category. As a benchmark, the first column of the table contains the plaintiff win rate for each case category for cases with private defendants. The second column contains the win rate by case category for cases with the government as defendant. The prediction of the case selection model, summarized in tables 1 and 2, for both personal injury and job discrimination cases is that plaintiff win rates will be higher in cases with the government as defendant. The third column of the table contains the difference in plaintiff win rates between cases with the government as defendant and cases with private defendants. The tabulations provide mixed evidence on this prediction. Overall, plaintiff win rates are 2.5 percentage points higher in personal injury cases with the government as defendant ($p <$

0.0005) but 10.5 percentage points *lower* in job discrimination cases with the government as defendant ($p < 0.0005$). Within the personal injury cases, the evidence is also mixed. Of the eight case categories, the point estimate of the difference is positive, as expected, in five and negative in three. Three of the five positive estimates are significantly positive at conventional levels and two of the three negative estimates are significantly different from zero at conventional levels.[26]

Estimates of linear probability models of plaintiff win rates at trial that control for case category, filing year, and federal court district are contained in tables 10 and 11 for personal injury and job discrimination cases respectively. Based on the estimates in table 10, the raw 2.5 percentage point difference in trial rates in personal injury cases increases to 3.6 percentage points controlling for case category. Controlling for year of filing alone does not change the raw difference substantially, but controlling for the district court moves the point estimate of the difference to near zero and insignificance. Overall, controlling for case category, filing year, and district court reduces the raw difference from 2.5 points to 1.8 points. This difference is marginally statistically significantly positive ($p = 0.051$) and is consistent with the prediction of our model.

Similar estimates for job discrimination cases, where the raw difference of -10.5 percentage points is not consistent with the predictions of the model, are contained in table 11. The raw difference is not affected significantly by the inclusion of the control variables. Controlling for filing year and district court increases the point estimate of the raw difference from -10.5 points to -11.4 points, and the plaintiff win rate in job discrimination cases remains inconsistent with the selection model.

Plaintiff Win Rates - Government as Plaintiff

As before, our analysis of the government as plaintiff focuses only on job discrimination cases. The entry in the fourth column of table 9 contains the plaintiff win rate for job discrimination cases with the government as plaintiff. The prediction of the case selection model for job discrimination cases is that plaintiff win rates will be higher in cases with the

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[26] One of the three contrary results is "assault, libel, slander", which, as we noted earlier, is a conceptually awkward category. Supra note 26.

government as plaintiff, and the tabulations are consistent with this prediction. The fifth column of the table contains the difference in win rates between cases with the government as plaintiff and cases with private plaintiffs. Plaintiff win rates are 16.8 percentage points higher in job discrimination cases with the government as plaintiff ($p < 0.0005$).

Once again, in order to consider the role of filing year and federal court district, we estimated linear probability models of the probability of a plaintiff win at trial. These estimates are contained in table 12. The raw difference in the plaintiff win rate of 16.8 percentage points is roughly unaffected by the inclusion of the control variables. Controlling for both filing year and court district reduces the point estimate of the difference in plaintiff win rates from 16.8 to 15.8 points. This difference remains strongly statistically significant and is consistent with the prediction of our model.

Further Discussion of Results

Our model's predictions about trial rates are strongly confirmed, but the model's ability to account for trial win rates is more limited. Why might this be?

One potential answer is that there are omitted factors affecting the decision to file claims against the government. Specifically, plaintiffs may overestimate their chances of success against the government as compared to their estimates of the chances of success against private parties. Judges and juries may be more protective of the government than plaintiffs believe they will be (Eisenberg, 1989:1599-1600). Or information about government behavior may be less readily observable and discoverable than information about private party behavior.[27]

The model is especially vulnerable in its prediction that government defendants are more likely to lose job discrimination trials than are private defendants. In this area, it may be that plaintiffs' perceptions about levels of government discrimination are out of line with reality. If plaintiffs' perceptions about government discriminatory behavior are

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[27] In one perspective, even partial vindication of the model's prediction that the government will fare relatively poorly at trial is powerful evidence of the need for a case selection model. Conventional wisdom is that one should observe higher than normal success rates for powerful government litigants such as the United States (Eisenberg and Schwab, 1988b:774-76).

skewed, we should observe higher rates of job discrimination lawsuits against the U.S. per worker than we observe against private employers. This is in fact the case.

For example, in 1990, the federal government employed 3.26 million nonfarm workers (U.S. Census Bureau, 1998:Table A-51). The civilian labor force in that year consisted of approximately 115.5 million non-U.S. government workers (U.S. Census Bureau, 1998:Table A-19). About 15 percent of workers are not covered by Title VII due to its limitation to large employers (Eisenberg and Schwab, 1988a:602).[28] This leaves about 98 million non-U.S. government workers covered by Title VII, roughly 30 times the number of U.S. government workers. Yet federal job discrimination lawsuits against non-U.S. defendants run only roughly eight to nine times the number of job discrimination lawsuits against the U.S. Job discrimination lawsuits thus are filed at a much higher rate against the U.S. than against private parties. Unless the U.S. is massively more discriminatory than private parties, this high claiming rate could be the source of the unexpectedly low trial win rate against the U.S.[29] A relatively weak class of cases may be being filed against the U.S.

In comparison, the rate of personal injury tort claiming against the U.S. is much lower. In federal court alone, diversity actions filed against private parties are about nine to ten times the number of FTCA actions against the U.S. And the diversity actions comprise a relatively small fraction of personal injury tort action. Most of it occurs in state court (Eisenberg et al., 1996). Thus, claiming rates against the U.S. in the personal injury tort area probably more accurately reflect the level of U.S. government misbehavior than do claiming rates against the U.S. in the job discrimination area. The U.S. appears to act as a magnet for job discrimination plaintiffs in a way that it does not for tort victims. This may explain why our model predicts relative win rates better in the personal injury tort

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[28] Some of these workers could bring an action under sec. 1981.

[29] In fact, the federal government appears to be less discriminatory in employment on the basis of race and sex. For example, we find using the February 1995 and February 1997 CPSs, that, after controlling for education and age, the gap in wages between men and women and between whites and nonwhites is significantly smaller in the Federal government than in the private sector. We find additionally that the fraction of nonwhites employed by the federal government is twice as high as the fraction of whites employed by the federal government, while there is no difference for females. These differences are probably due to the existence of the Civil Service System, which attempts to administer employment decisions in the federal government on race and sex neutral grounds. For an early analysis with similar findings, see Smith (1977).

area than in job discrimination cases.[30]

8. Summary and Conclusion

Overall, we found substantial support for the predictions of the case selection model, summarized in table 2, for differences in case outcomes between the government and private litigants. The model generates six predictions for trial rates and plaintiff win rates for the categories of cases and roles for the government we study. Five of the six predictions are supported by the data. The only deviation is that the plaintiff win rate in job discrimination cases with the government as defendant is lower than the plaintiff win rate in job discrimination cases with private defendants while the model predicts the opposite relationship. This anomaly may be attributable to extraordinarily high job discrimination claiming rates against the U.S.

This study's results are important in showing the power of modeling the case selection process carefully when evaluating case outcomes. The government goes to trial at a higher rate than private parties when it is defendant and at a lower rate than private parties when it is plaintiff. The government as defendant appears to lose more often than private defendants and the government as plaintiff appears to win more often than private plaintiffs. These findings are easily understood in the context of the case selection model, and they cannot be easily explained by theories that rely on such factors as differential quality of counsel.[31]

Other factors we do not consider here undoubtedly also influence trial rates and trial win rates.[32] For example, we have no direct measures of quality of counsel. We do not deny that alternative explanations may exist for the patterns we predict and observe. However,

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[30] In the context of our model, the higher claiming rate against the government in job discrimination cases could be due either to lower plaintiff costs (pecuniary or non-pecuniary) or to relative optimism on the part of plaintiffs against the government regarding the likelihood of a trial victory (high θ_p). In either case, our selection model predicts not only lower plaintiff win rates against the government but also the higher trial rates we predict and find for job discrimination cases with government defendants.

[31] The results are also consistent in their support for the case selection model with the results of our earlier work, where we used the distinction between corporations and individuals as parties in diversity cases (Eisenberg and Farber).

[32] For a survey and synthesis, see Kessler et al.

our model's predictions about both trial rates and success rates in litigation as they relate to the identity of both plaintiffs and defendants helps to separate its implications from factors emphasized in other models, which often have implications for only a single outcome.[33]

A final point is that testing the case selection model is hampered by the likelihood that only a tiny fraction of potential claims are filed as lawsuits. Essentially, we are looking for the effects of the case selection model when only the "successes" are observed. That the model does as well as it does with such "partial observability" is encouraging in our view, but more direct evidence could come from settings where both cases selected and those not selected can be observed.

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[33] See Eisenberg and Farber for mention of alternative explanations.

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TABLE 1
Summary of Predictions of Selection Model
for Trial Rates and Plaintiff Win Rates at Trial
by Case Characteristic

Param.	Trial Rate Direct Effect	Trial Rate Selection Effect	Trial Rate Overall	Win Rate Direct Effect	Win Rate Selection Effect	Win Rate Overall
π	0	-	-	+	+	+
D	+	-	?	0	-	-
C_p	-	+	?	0	+	+
C_d	-	-	-	0	-	-

TABLE 2
Summary of Predictions of Selection Model
for Trial Rates and Plaintiff Win Rates at Trial
Differences between Governement and Private Parties

Type of Case	Role of Gov	Trial Rate	Plaintiff Win Rate
Personal Injury	Defendant	$Gov > Priv$	$Gov > Priv$
Job Discrimination	Defendant	$Gov > Priv$	$Gov > Priv$
Job Discrimination	Plaintiff	$Gov < Priv$	$Gov > Priv$

TABLE 3

Case Distribution and Resolution by Year of Filing

Year Filed	Personal Injury Cases			Job Discrimination Cases		
	Number of Cases	Frac Pending (9/30/97)	Frac Tried	Number of Cases	Frac Pending (9/30/97)	Frac Tried
1979	7080	.0000	.0823	2431	.0000	.1728
1980	14324	.0001	.0977	5487	.0002	.1620
1981	12048	.0000	.0922	7047	.0000	.1645
1982	12893	.0000	.0942	8321	.0002	.1509
1983	12438	.0001	.0908	10125	.0002	.1326
1984	11966	.0003	.0957	8492	.0004	.1229
1985	17971	.0001	.0710	8659	.0005	.1172
1986	24156	.0001	.0608	9132	.0007	.1038
1987	25826	.0091	.0617	8484	.0006	.0952
1988	28923	.0007	.0494	8668	.0006	.0935
1989	28998	.0002	.0449	8378	.0007	.0856
1990	26068	.0010	.0489	8122	.0028	.0825
1991	23367	.0015	.0486	9112	.0033	.0762
1992	24963	.0550	.0488	11208	.0072	.0728
1993	28771	.1546	.0453	13517	.0166	.0688
1994	30637	.2410	.0438	16624	.0410	.0575
1995	33647	.2867	.0387	20702	.1165	.0424
1996	32153	.4121	.0243	23071	.3789	.0243
1997	22724	.7452	.0033	17888	.8488	.0100
Total	418953	.1274	.0567	205368	.1355	.0873

Note: *Fraction Pending* is computed as the fraction of *Number of Cases Filed* that are not resolved by September 30, 1997 *Fraction Tried* is computed as the fraction of cases resolved by September 30, 1997 that were tried to a verdict.

TABLE 4

Case Distribution and Outcomes by Case Category

Case Category	Cases	% GovDef	% GovPltf	Trial Rate	Pltf Win Rate
Personal Injury					
Airplane	5017	0.286	---	0.0875	0.473
Assault, Libel, Slander	5865	0.141	---	0.0663	0.504
Marine	5063	0.293	---	0.0816	0.558
Motor Vehicle	65236	0.119	---	0.0678	0.635
Other PI	63323	0.201	---	0.0810	0.464
Medical PI	15378	0.406	---	0.1171	0.367
Asbestos	45677	0.003	---	0.0114	0.680
PI Product Liability	40162	0.079	---	0.0730	0.287
Total Personal Injury	245721	0.140	---	0.0653	0.477
Job Discrimination	102271	0.091	0.049	0.0799	0.255

Note: The number of cases consists of all lawsuits in the indicated categories filed in Federal Courts between July 1979 and September 1991 and resolved (dropped, settled, or tried to a verdict) by September 30, 1997. The trial rate is the fraction of cases that were tried to a verdict by September 30, 1997. The Plaintiff win rate is computed as the ratio of the number of cases where a judgement was entered for the plaintiff after a trial verdict divided by the number of cases where a judgement was entered for one party or the other after a trial verdict.

TABLE 5

Trial Rates by Party Identity and Case Category

Case Category	Private	Gov Defendant	ΔGov	Gov Plaintiff	ΔGov
Personal Injury					
Airplane	0.074	0.121	0.047		
	(0.004)	(0.008)	(0.008)		
Assault, Libel, Slander	0.068	0.053	-0.015		
	(0.003)	(0.010)	(0.009)		
Marine	0.071	0.108	0.037		
	(0.004)	(0.008)	(0.008)		
Motor Vehicle	0.065	0.090	0.025		
	(0.001)	(0.003)	(0.003)		
Other PI	0.075	0.104	0.029		
	(0.001)	(0.003)	(0.002)		
Medical PI	0.113	0.123	0.011		
	(0.002)	(0.004)	(0.004)		
Asbestos	0.011	0.022	0.010		
	(0.001)	(0.026)	(0.021)		
PI Product Liability	0.073	0.076	0.003		
	(0.001)	(0.005)	(0.005)		
All PI	0.059	0.101	0.042		
	(0.001)	(0.001)	(0.001)		
Job Discrimination	0.116	.128	0.012	0.071	-0.045
	(0.001)	(0.003)	(0.004)	(0.005)	(0.005)

Note: The sample consists of all lawsuits in the indicated categories filed in Federal Courts between July 1979 and September 1991 and resolved (dropped, settled, or tried to a verdict) by September 30, 1997. The trial rate is the fraction of cases that were tried to a verdict by September 30, 1997. The ΔGov's are the differences in trial rates between cases with the indicated government parties and the trial rate in cases with private parties. There are no personal injury cases with government as plaintiff. Sample sizes are contained in table 2. The numbers in parentheses are standard errors.

TABLE 6
Effect of Defendant Identity on Trial Rates
Linear Probability Model Estimates

Personal Injury Cases

Model	(1)	(2)	(3)	(4)	(5)
ΔGov	0.042	0.023	0.034	0.046	0.028
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Case Category	No	Yes	No	No	Yes
Year of Filing	No	No	Yes	No	Yes
District Court	No	No	No	Yes	Yes

Note: ΔGov is the coefficient on a dummy variable for government defendant in a linear probability model of the probability of a trial verdict on the indicated control variables. As such, it represents the regression-adjusted difference in trial rates between cases with the government as defendant and the trial rate in cases with private defendants. The sample consists of 245,721 personal injury lawsuits filed in Federal Courts between July 1979 and September 1991 and resolved (dropped, settled, or tried to a verdict) by September 30, 1997. The trial rate is the fraction of cases that were tried to a verdict by September 30, 1997. There are 9 case categories, 13 filing years, and 91 district courts. The numbers in parentheses are robust Huber-White standard errors.

TABLE 7
Effect of Defendant Identity on Trial Rates
Linear Probability Model Estimates

Job Discrimination Cases

Model	(1)	(2)	(3)	(4)
ΔGov	0.012	0.014	0.013	0.016
	(0.004)	(0.004)	(0.004)	(0.004)
Year of Filing	No	Yes	No	Yes
District Court	No	No	Yes	Yes

Note: ΔGov is the coefficient on a dummy variable for government defendant in a linear probability model of the probability of a trial verdict on the indicated control variables. As such, it represents the regression-adjusted difference in trial rates between cases with the government as defendant and the trial rate in cases with private defendants. The sample consists of 97,265 job discrimination lawsuits filed in Federal Courts by private plaintiffs between July 1979 and September 1991 and resolved (dropped, settled, or tried to a verdict) by September 30, 1997. The trial rate is the fraction of cases that were tried to a verdict by September 30, 1997. There are 13 filing years and 91 district courts. The numbers in parentheses are robust Huber-White standard errors.

TABLE 8

Effect of Plaintiff Identity on Trial Rates

Linear Probability Model Estimates

Job Discrimination Cases

Model	(1)	(2)	(3)	(4)
ΔGov	-0.045	-0.038	-0.044	-0.036
	(0.004)	(0.004)	(0.004)	(0.004)
Year of Filing	No	Yes	No	Yes
District Court	No	No	Yes	Yes

Note: ΔGov is the coefficient on a dummy variable for government plaintiff in a linear probability model of the probability of a trial verdict on the indicated control variables. As such, it represents the regression-adjusted difference in trial rates between cases with the government as plaintiff and the trial rate in cases with private plaintiffs. The sample consists of 92,944 job discrimination lawsuits filed in Federal Courts by private plaintiffs between July 1979 and September 1991 and resolved (dropped, settled, or tried to a verdict) by September 30, 1997. The trial rate is the fraction of cases that were tried to a verdict by September 30, 1997. There are 13 filing years and 91 district courts. The numbers in parentheses are robust Huber-White standard errors.

TABLE 9
Plaintiff Win Rates at Trial by Party Identity and Case Category

Case Category	Private	Gov Defendant	ΔGov	Gov Plaintiff	ΔGov
Personal Injury					
Airplane	0.463	0.487	0.024		
	(0.032)	(0.039)	(0.050)		
Assault, Libel, Slander	0.529	0.326	-0.204		
	(0.027)	(0.075)	(0.078)		
Marine	0.534	0.593	0.059		
	(0.033)	(0.041)	(0.053)		
Motor Vehicle	0.627	0.678	0.051		
	(0.008)	(0.019)	(0.021)		
Other PI	0.478	0.428	-0.051		
	(0.008)	(0.014)	(0.016)		
Medical PI	0.272	0.494	0.222		
	(0.016)	(0.018)	(0.024)		
Asbestos	0.682	0.000	-0.682		
	(0.025)	(0.489)	(0.482)		
PI Product Liability	0.281	0.345	0.064		
	(0.010)	(0.033)	(0.034)		
All PI	0.471	0.496	0.025		
	(0.005)	(0.009)	(0.010)		
Job Discrimination	0.260	.156	-0.105	0.428	0.168
	(0.005)	(0.013)	(0.014)	(0.025)	(0.025)

Note: The sample consists of all lawsuits in the indicated categories filed in Federal Courts between July 1979 and September 1991 and resolved by a trial verdict by September 30, 1997. The Plaintiff win rate is computed as the ratio of the number of cases where a judgement was entered for the plaintiff after a trial verdict divided by the number of cases where a judgement was entered for one party or the other after a trial verdict. The ΔGov's are the differences in plaintiff win rates between cases with the indicated government parties and the plaintiff win rate in cases with private parties. There are no personal injury cases with government as plaintiff. Summary Statistics are contained in table 2. The numbers in parentheses are standard errors.

TABLE 10
Effect of Defendant Identity on Plaintiff Win Rates
Linear Probability Model Estimates

Personal Injury Cases

Model	(1)	(2)	(3)	(4)	(5)
ΔGov	0.025	0.036	0.027	0.006	0.018
	(0.010)	(0.010)	(0.010)	(0.011)	(0.011)
Case Category	No	Yes	No	No	Yes
Year of Filing	No	No	Yes	No	Yes
District Court	No	No	No	Yes	Yes

Note: ΔGov is the coefficient on a dummy variable for government defendant in a linear probability model of the probability of a plaintiff win at trial on the indicated control variables. As such, it represents the regression-adjusted difference in win rates between cases with the government as defendant and the trial rate in cases with private defendants. The sample consists of 14,288 personal injury lawsuits filed in Federal Courts between July 1979 and September 1991 and tried to a verdict by September 30, 1997. There are 9 case categories, 13 filing years, and 91 district courts. The numbers in parentheses are robust Huber-White standard errors.

TABLE 11
Effect of Defendant Identity on Plaintiff Win Rates
Linear Probability Model Estimates

Job Discrimination Cases

Model	(1)	(2)	(3)	(4)
ΔGov	-0.105	-0.107	-0.110	-0.114
	(0.012)	(0.012)	(0.013)	(0.013)
Year of Filing	No	Yes	No	Yes
District Court	No	No	Yes	Yes

Note: ΔGov is the coefficient on a dummy variable for government defendant in a linear probability model of the probability of a plaintiff win at trial on the indicated control variables. As such, it represents the regression-adjusted difference in plaintiff win rates between cases with the government as defendant and the plaintiff win rate in cases with private defendants. The sample consists of 10,222 job discrimination lawsuits filed in Federal Courts by private plaintiffs between July 1979 and September 1991 and tried to a verdict by September 30, 1997. There are 13 filing years and 91 district courts. The numbers in parentheses are robust Huber-White standard errors.

TABLE 12
Effect of Plaintiff Identity on Plaintiff Win Rates
Linear Probability Model Estimates

Job Discrimination Cases

Model	(1)	(2)	(3)	(4)
ΔGov	0.168	0.162	0.164	0.158
	(0.028)	(0.029)	(0.028)	(0.028)
Year of Filing	No	Yes	No	Yes
District Court	No	No	Yes	Yes

Note: ΔGov is the coefficient on a dummy variable for government plaintiff in a linear probability model of the probability of a plaintiff win at trial on the indicated control variables. As such, it represents the regression-adjusted difference in plaintiff win rates between cases with the government as plaintiff and the plaintiff win rate in cases with private plaintiffs. The sample consists of 9,451 job discrimination lawsuits filed in Federal Courts by private plaintiffs between July 1979 and September 1991 and tried to a verdict by September 30, 1997. There are 13 filing years and 91 district courts. The numbers in parentheses are robust Huber-White standard errors.