Do Attorneys Do Their Clients Justice? An Empirical Study of Lawyers' Effects on Tax Court Litigation Outcomes

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DO ATTORNEYS DO THEIR CLIENTS JUSTICE?
AN EMPIRICAL STUDY OF LAWYERS' EFFECTS ON TAX COURT LITIGATION OUTCOMES

Leandra Lederman* & Warren B. Hrung**

“On television, it looks simple enough: You go to court. You make your case, with feeling, before a sharp-tongued but well-meaning judge. After a few moments—and a commercial break—the judge renders a decision. It looks so easy, you wonder: Who needs a lawyer?”

“‘[O]ne who is his own lawyer has a fool for a client . . .’”

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1. Dante Chinni, More Americans Want to be Their Own Perry Mason, CHRISTIAN SCI. MONITOR, Aug. 20, 2001, at 1.


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INTRODUCTION

Do attorneys really obtain better outcomes than clients could obtain for themselves? The answer to this question is relevant to myriad areas, including divorce, immigration, real estate transactions, probate, bankruptcy, tax, social security disability claims, and criminal defense. Bar groups defending unauthorized practice of law statutes often argue that nonlawyers may lack the competence necessary for legal work. Opponents counter that parties can represent themselves adequately, at least in certain types of cases.


9. See, e.g., Rhode, supra note 5, at 708 ("Opponents of increased competition never lack examples of nonlawyer providers who have offered negligent advice, [or] failed to complete essential services . . . ."); North Carolina State Bar, Unauthorized Practice of Law, http://www.ncbar.com/programs/upl.asp (last visited Sept. 7, 2006) ("Assistance with the preparation of legal documents is an area in which this victimization commonly occurs. Bankruptcy debtors receive bad advice from non-attorneys helping them fill out bankruptcy forms. Couples seeking to obtain a simple divorce are misled by internet document preparation services about the legal grounds and requirements for divorce."); Tennessee Bar Association, Attorney General Announces "We the People" Will Reform its Business Practices and Pay Refunds, Feb. 9, 2006, http://www.tbs2.org/tbatoday/news/2006/wethepeople_020906.html (last visited Sept. 7, 2006) ("Consumers will now know that if they choose to use We The People ["a self-described 'legal document preparation company'"], they will only receive typing, forms or written overviews—none of which can take the place of the advice and services of competent, independent lawyers who are licensed to practice in Tennessee.").

10. See Rhode, supra note 5, at 703-04; Ralph C. Cavanagh & Deborah L. Rhode, Project, The Unauthorized Practice of Law and Pro Se Divorce: An Empirical Analysis, 86 Yale L.J. 104, 123-29 (1976); see also Deborah J.
Another important question for legal advocates is whether lawyers expedite or delay the resolution of cases. Not only may time be money—particularly for those paying an attorney by the hour—but the justice system itself is affected by whether litigated cases are resolved expeditiously. The popular conception of attorneys in this regard may not be particularly favorable. Professors Gilson and Mnookin have stated:

Today, the dominant popular view is that lawyers magnify the inherent divisiveness of dispute resolution. According to this vision, litigators rarely cooperate to resolve disputes efficiently. Instead, shielded by a professional ideology that is said to require zealous advocacy, they endlessly and wastefully fight in ways that enrich themselves but rarely advantage the clients.

Testing empirically whether attorneys improve outcomes can be very difficult, particularly because the information easiest to access, published decisions, ignores the large universe of settled cases. Fortunately, there is a forum that lends itself to statistical analysis of this question. In the United States Tax Court ("Tax Court"), a large portion of the non-government litigants pursue their cases pro se, providing a natural laboratory for comparing the outcomes that

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13. See Eisenberg et al., supra note 11, at 442 (estimating that 2.9% of state cases and 5% of federal cases, excluding asbestos cases, are tried); Mori Irvine, Better Late than Never: Settlement at the Federal Court of Appeals, 1 J. APP. PRAC. & PROCESS 341, 341 (1999) ("Nearly 95% of all federal civil cases will settle before trial, leaving less than five percent of civil cases to be appealed.") (footnotes omitted). Similarly, approximately five percent of Tax Court cases result in an opinion decision. See Leandra Lederman, Which Cases Go to Trial?: An Empirical Study of Predictors of Failure to Settle, 49 CASE W. RES. L. REV. 315, 317 n.2 (1999) (citing information obtained from the Internal Revenue Service ("IRS") in response to a Freedom of Information Act request).

14. According to IRS data, in “Tax Court Appeals Settlements” of cases other than small tax cases (“S cases”), for fiscal year 1993, for example, 46.01% of taxpayers were pro se. Office of Chief Counsel, Internal Revenue Service,
pro se and represented litigants reach with the same adversary, the Internal Revenue Service ("IRS"). Tax Court litigation also offers a rare and valuable opportunity to examine settlement results because it retains records for cases the parties settle. Furthermore, Tax Court cases are civil cases that typically involve disputes over monetary amounts, so case results are easy to quantify and compare.

This Article exploits this opportunity to test the effects attorneys have on case outcomes, using a unique data set consisting

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Report Prepared for American Bar Association Tax Section Court Procedure Committee at Scottsdale, Ariz. 15 (Jan. 2001) (on file with authors) [hereinafter January 2001 IRS Report]. The comparable figure for 1994 was 48.97%. Id. For cases tried and decided by the Tax Court for fiscal year 1993 (other than S cases), 41.32% of taxpayers were pro se. Id. at 16. The comparable figure for 1994 was 35.58%. Id. The report does not state at what point pro se status was determined.

15. The Tax Court litigation studied here involve IRS assertions of a "deficiency" (essentially an understatement of tax). See infra note 96 and accompanying text. The IRS formally asserts a tax deficiency by sending the taxpayer a letter known as a "notice of deficiency." See I.R.C. § 6212 (LexisNexis 2006). The taxpayer generally has ninety days within which to respond by petitioning the Tax Court. See id. § 6213(a).

16. Samuel R. Gross & Kent D. Syverud, Don't Try: Civil Jury Verdicts in a System Geared to Settlement, 44 UCLA L. REV. 1, 4 (1996) (stating that settled cases are often "invisible" despite their prevalence); see also Robert H. Gertner, Asymmetric Information, Uncertainty, and Selection Bias in Litigation, 1993 U. CHI. L. SCH. ROUNDTABLE 75, 76 ("In only rare and special circumstances is detailed data available on disputes that are settled prior to trial . . . .").

17. A prior study of Tax Court cases by Professor Lederman found that cases do not randomly settle or go to trial, and that particular case characteristics, such as aspects of the judge to which the case is assigned, influence that outcome. See Lederman, supra note 13, at 332. That study found that the presence of counsel for the taxpayer did not have a statistically significant effect on whether or not the case was tried. Id. at 338-39, app. E at 357. This Article builds on the data used in that study to focus on the effect the presence of taxpayer counsel has on the financial outcome of the case and the length of time to settlement or trial.

18. See Lederman, supra note 13, at 327 & n.47.

19. The Tax Court is the forum of choice for most taxpayers litigating against the IRS. See Leandra Lederman, "Civil"izing Tax Procedure: Applying General Federal Learning to Statutory Notices of Deficiency, 30 U.C. DAVIS L. REV. 183, 185 & n.11 (1996). The principal reason that the overwhelming majority of litigated federal tax cases go to Tax Court is that the taxpayer need not pay the amount in dispute before petitioning the Tax Court. See Lundy v. IRS, 45 F.3d 856, 860 n.7 (4th Cir. 1995), rev'd on other grounds sub nom. Comm'r v. Lundy, 516 U.S. 235 (1995) ("The advantage of and reason for the Tax Court is that the average taxpayer can challenge a notice of deficiency without first having to pay the deficient amount.").
of a random sample of settled and tried Tax Court cases. It tests empirically the effect the presence of counsel for the taxpayer has both on the financial outcome of the case (the proportion of the tax in issue recovered by the IRS) and the length of time to settlement or trial. In order to isolate the effects of attorneys, the statistical analyses control for such factors as the amount at stake in the case, the type of taxpayer (individual, estate, or corporation), and the complexity of the case. As discussed further below, the results suggest that attorneys obtain significantly better results in tried cases than unrepresented taxpayers do—and that the magnitude of that effect increases with greater attorney experience—but, surprisingly, that attorneys do not obtain better outcomes in settled cases. The results also suggest that taxpayers' attorneys do not affect the amount of time Tax Court cases take to settle or go to trial. The implications of these findings are examined infra in Parts II.C. and III.C.

This Article has three principal parts. First, Part I unpacks the characteristics of attorneys that may affect litigation outcomes, discussing five distinct ways in which attorneys typically differ from litigants appearing pro se.

Next, Part II of the Article examines how attorneys can affect the monetary outcome of cases. Part II.A discusses both how, in theory, the five aspects of attorney representation discussed in Part I may influence the financial outcomes in tried cases and presents the results of the empirical study of this question. Part II.B does the same for settled cases. Part II.C analyzes the implications of the results, which suggest a strong, positive effect of attorneys on outcomes in tried cases—an effect that increases with attorney experience—but no significant effect in settled cases.

Part III of the Article analyzes how attorneys might affect the time cases take to resolve. Part III.A discusses both (1) how the five aspects of attorney representation may influence the timing of trials, and (2) the results of empirical analysis of this question. Part III.B does the same for settlements. Finally, Part III.C analyzes the results, which suggest that attorneys neither delay nor expedite trials or settlements. Following Part III, the Article concludes.

20. As discussed in the Appendix, Professor Lederman collected and compiled the data used in this study. See infra note 180 and accompanying text.
I. UNPACKING ATTORNEY CHARACTERISTICS THAT AFFECT LITIGATION

The feature that most distinguishes settlement negotiations from other bargaining contexts is the presence of lawyers, yet traditional accounts of suits and settlements generally ignored their presence. Although the theoretical effects of certain attorney behaviors have been analyzed, there is no comprehensive treatment of the features attorneys bring to litigation that differ from pro se litigants, and how those features affect cases’ outcomes. Intuition suggests that attorneys should add value, but is that really the case? And, even if they do, does that come at the expense of prolonged litigation?

Attorneys representing litigation clients differ from pro se litigants in at least five ways that may affect case outcomes. Unlike most pro se litigants, attorneys typically are trained experts, repeat players, agents rather than principals, their fees add

21. See Gilson & Mnookin, supra note 12, at 510 (“[T]he economic literature, with rare exceptions, shares a troublesome feature. Almost by convention, litigation is modeled as a two-person game between principals, thereby abstracting away the legal system’s central institutional characteristic—litigation is carried out by agents.”) (footnotes omitted); Russell Korobkin & Chris Guthrie, Psychology, Economics, and Settlement: A New Look at the Role of the Lawyer, 76 TEX. L. REV. 77, 81 (1997) (“Although most accounts of lawsuit settlement . . . share the simplifying assumption that litigation is a two-party activity carried out by a plaintiff and a defendant, the feature of litigation bargaining that most differentiates it from other types of negotiation is the presence of lawyers.”) (footnotes omitted).


23. The context for the discussion in this Article is private sector attorneys. Government attorneys, such as the IRS attorneys who taxpayers face, likely have different incentives and goals than private attorneys because of the difference in compensation structure and the different nature of the government client. That is, IRS attorneys are paid a salary that does not vary with their caseload and have as the client a government agency that is a repeat player but does not fully internalize its costs.

24. See Jason Scott Johnston & Joel Waldfogel, Does Repeat Play Elicit Cooperation? Evidence from Federal Civil Litigation, 31 J. LEGAL STUD. 39, 42 (2002) (“Most litigators do not appear frequently in court, so most litigation is between one-shot litigants. Many attorneys, by contrast, appear frequently enough that even particular pairs of attorneys oppose each other repeatedly.”); see also Gilson & Mnookin, supra note 12, at 513.

25. See Gilson & Mnookin, supra note 12, at 527; see also Herbert M.
transaction costs, and their litigation decisions may be less affected by certain cognitive biases. Each of these aspects of attorneys is surveyed briefly below and then applied in context in Parts II and III of this Article, in order to determine their likely effects on financial outcomes and the timing of settlements and trials.

A. Expertise

Attorneys are experts who have both specialized training and often specialize in a particular practice area. This expertise contrasts with the lack of legal expertise a typical pro se litigant has. Although the likely benefits to litigants of attorney expertise is an obvious point, it is an important one.

B. Repeat Player Effects

There are at least two possible ways in which the presence of an attorney who is a repeat player in a particular court or bar is relevant to litigation outcomes. First, repeat experiences should give rise to increased expertise and credibility. Second, attorneys who are repeat players in a particular type of litigation and on a particular side, as private tax controversy attorneys are, will have stakes beyond the single litigation, much as litigants who are

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26. See David Laro, The Evolution of the Tax Court as an Independent Tribunal, 1995 U. Ill. L. Rev. 17, 26-27 (“[M]ost pro se taxpayers do not adequately know the Tax Court Rules or the Federal Rules of Evidence and are thus handicapped in the courtroom.”); cf. Kritzer, supra note 6, at 109 (“[The training in procedure and evidence combined with the formal advocacy experience tax lawyers . . . have provides a background that better serves the client in the [Wisconsin Tax Appeals Commission] hearing context.”).

27. See Kritzer, supra note 6, at 201 (“My observations make it clear that expertise is central to effective advocacy.”); see also id. at 83 (reporting statistics on outcomes in hearings before the Wisconsin Tax Appeals Commission).

28. In the Tax Court litigation context, many of the attorneys may be repeat players in the tax controversy bar and should routinely face the IRS, even if they try relatively few cases.


31. See, e.g., Frank B. Cross, In Praise of Irrational Plaintiffs, 86 Cornell
repeat players do. Such attorneys may be most concerned with establishing reputations that maintain or increase their effectiveness in the relevant bar or courts. Professors Ronald Gilson and Robert Mnookin famously analyzed the effects of attorneys on the multi-round prisoner's dilemma "litigation game." In a prisoner's dilemma, the highest aggregate payoff is if both parties cooperate, but each party has an incentive to defect. Gilson and Mnookin argued that lawyers could help overcome the dilemma by establishing reputations as cooperators; clients could credibly commit to cooperate in resolving the dispute by choosing a lawyer with a cooperative reputation.

Alternatively, it is possible that a lawyer might seek to establish a reputation as what Gilson and Mnookin term a "gladiator." Such an attorney might refuse to accept a settlement offer or demand a more favorable settlement in order to establish or further a reputation as a tough negotiator. This may be viewed as a form of strategic behavior.

L. REV. 1, 9-10 (2000); Galanter, supra note 30, at 97-103.
32. See Galanter, supra note 30, at 101; Lederman, supra note 13, at 342.
33. See Galanter, supra note 30, at 118. Attorneys are constrained by ethical rules from certain strategies that principals who are repeat players can follow, such as "trading off some cases for gains on others." Id. at 117 & n.52 (quoting Lawrence E. Rothstein, The Myth of Sisyphus: Legal Services Efforts on Behalf of the Poor, 7 U. Mich. J.L. Reform 493, 502 (1974)).
34. See Gilson & Mnookin, supra note 12, at 512.
35. See generally id. The Gilson/Mnookin model treats the hiring of an attorney of a particular type as a reliable signal of the party's litigation strategy. See id. at 549.
36. See id. at 539; see also Johnston & Waldofgel, supra note 24, at 44.
37. See, e.g., John C. Coffee, Jr., Understanding the Plaintiff's Attorney: The Implications of Economic Theory for Private Enforcement of Law Through Class and Derivative Actions, 86 COLUM. L. REV. 669, 712-13 (1986); see also Peter H. Huang, Lawsuit Abandonment Options in Possibly Frivolous Litigation Games, 23 REV. LITIG. 47, 73 (2004) ("[L]awyers may exacerbate cognitive and emotional issues, due to conflicts of interest and repeat-play considerations, such as those involving developing a reputation for being tough or playing hardball in pretrial settlement negotiations.").
38. See Coffee, supra note 37. He states:
Although a refusal to accept a reasonable settlement offer may be illogical in terms of an individual case, such a refusal may signal a plaintiff's attorney's toughness at bargaining, which could enhance his position in future settlement negotiations. Willingness to go to trial distinguishes this attorney from others who seldom try their cases. Even more importantly, a litigated victory may significantly enhance a lawyer's reputation . . . .

Id. at 713. That is, gladiator attorneys may add agency costs in the form of rejection of reasonable settlement offers. See id. at 712-13; see infra Part I.C for
Professors Rachel Croson and Robert Mnookin examined whether the predictions of the Gilson/Mnookin model were borne out in laboratory experiments. In one game, the “litigation game,” subjects chose a cooperative lawyer, a gladiator lawyer, or a lawyer who used a combination of those approaches. In a different game, termed the “prelitigation game,” subjects chose a lawyer type and then were matched with an opposing party. The rules of that game allowed those who chose a cooperative lawyer and faced a lawyer belonging to one of the other two types to change to another type of lawyer.

In each game, the lawyers played the game on the subjects' behalf. The study found that “significantly more cooperative agents are chosen in the prelitigation game than in the litigation game.” These results suggest that the ability to change attorneys (or change litigating style) may have a disciplining effect, encouraging both attorneys to remain cooperative.

Subsequently, Professors Jason Scott Johnston and Joel Waldfogel tested whether repeat play by attorneys elicits cooperation, using a data set of federal civil cases. They found that “attorneys are more likely to pursue cooperative litigation strategies when they frequently litigate against each other (and therefore expect to litigate against each other in the future with a high probability).” They also found that “a history of attorney repeat

40. Id. at 335-36.
41. Id. at 336. The possibility provided the subjects of changing from a cooperative lawyer to a gladiator (or partial gladiator) might decrease cooperation compared to allowing no option to switch because, after all, subjects are only allowed to change in the direction of gladiator behavior. Id. at 339. However, because the rules are known up front, the option to switch from a cooperative lawyer to a gladiator but not the reverse may encourage subjects to select a cooperative lawyer in the prelitigation game because that will be their only chance to select a cooperative lawyer; the selection is without risk, given the option to switch to a gladiator if the other party does not choose a cooperative lawyer; and the subjects know that the payoff if both parties cooperate is higher than if both parties defect.
42. Id. at 341.
43. In actual litigation, parties can change attorneys during the litigation, though such changes may be costly. See Gilson & Mnookin, supra note 12, at 524 (“[T]he price of firing [a] lawyer is the cost of bringing another lawyer up to speed in the litigation. While not a prohibition on changing lawyers, switching costs impose a substantial penalty on defection.”).
44. See Johnston & Waldfogel, supra note 24.
45. Id. at 59. The opposite result held true for attorneys in their data set
interaction [had] a significant negative effect on . . . the duration of legal disputes.  

C. Agency Costs of Representation

Attorneys are clients' agents. The presence of a lawyer as agent of a client-principal introduces costs that unrepresented litigants do not face, because, if lawyers are rational actors, they may tend to maximize interests that differ from those of their clients.

Because [an] agent does not reap the full reward from his efforts on the principal's behalf, and because the agent knows more than the principal about what the agent is doing . . . the agent has the incentive and opportunity to act—whether alone or in concert with others—in numerous ways that harm the principal's interests.

For example, "there are significant incentives for lawyers not to embrace early settlement. These incentives include the need to market services, the desire not to appear weak, the obligation to represent a client zealously, the thirst for justice, and last, but perhaps not least, the desire to maximize income." Thus, the

who were classmates. See id. at 55-58; infra note 164.

46. Johnston & Waldfogel, supra note 24, at 59. Interestingly, they also found that "cases that involve at least one nonlocal attorney are more likely to be tried, and tend to last longer, than cases that involve two local attorneys." Id. at 55. They explain:

In cases that involve one or more nonlocal attorneys, the attorneys are less likely to be familiar with one another and thus may find it more difficult to coordinate on a cooperative solution. They also likely perceive a lower probability of future interaction and, thus, are less responsive to potential future retaliation for failure to cooperate.

Id. Johnston and Waldfogel found that these effects were stronger for attorneys representing clients who were not themselves repeat players. Id. at 59-60. They "interpret[ed] this as evidence in favor of the hypothesis that it [is] not just that repeat-player attorneys learn how to cooperate with one another but that they have strong reputational interests in cooperating with attorneys they expect to soon encounter again." Id. They add, "[i]nstitutional parties still get the advantage of attorney familiarity. But because their own reputational interest is at stake, such clients effectively control and override the independent strategic interests of their attorneys." Id. at 60.

47. George M. Cohen, When Law and Economics Met Professional Responsibility, 67 FORDHAM L. REV. 273, 279 (1998). He adds, "[t]he principal must . . . find ways to control these agency costs. The primary means of control are monitoring, which involves frequent checking up on the agent, and bonding, which involves less frequent checking but large penalties for discovered misbehavior." Id. at 279-80.

48. Coyne, supra note 22, at 369. There are other sources of agency costs in
attorney's compensation arrangement might affect whether the attorney delays or expedites case resolution, even unconsciously. Ethical rules address this concern but probably do not fully resolve it.28

D. Transaction Costs of Representation

The presence of an attorney as an agent of the client also gives rise to legal fees, which are a form of transaction cost. An agreement to pay an attorney by the hour might make a litigant willing to accept a less advantageous settlement in order to avoid additional fees. Unrepresented taxpayers may therefore be more

the litigation context, as well. For example, the attorney might focus more effort on cases involving large or repeat clients and therefore spend less than the optimal amount of time on another client's case. Of course, attorneys may also be concerned about ethics and professionalism. See Johnson, supra note 25, at 603.

49. See Kritzer, supra note 25, at 1966-67 & n.132. Kritzer points out that "[o]verbilling, which is the incentive created by hourly fees, also creates significant ethical issues." Id. at 1967 n.132 (citing various articles). Professors Gilson and Mnookin also discuss another type of agency cost in the attorney-client relationship. See Gilson & Mnookin, supra note 12, at 528 ("For a lawyer with a limited number of clients, a particular client may be so important that the threat of withdrawn patronage may induce the lawyer to risk his cooperative reputation by behaving noncooperatively."). George Cohen lists other possible agency costs of legal representation: "lawyers colluding with their clients against others," Cohen, supra note 47, at 281, and "the fact that clients, their lawyers, and third parties may all have agency problems within themselves," id. at 284. In the interest of simplicity, this Article treats the client as a single unit and lawyers as practicing alone.

50. The Model Rules of Professional Conduct provide in part that, subject to an exception in paragraph (b), "a lawyer shall not represent a client if . . . there is a significant risk that the representation of one or more clients will be materially limited . . . by a personal interest of the lawyer." MODEL RULES OF PROF'L CONDUCT R. 1.7(a) (2006). For further discussion of the ethical issues raised by attorneys' incentives, see generally Cohen, supra note 47; Kritzer, supra note 25.


52. See Russell Korobkin, Aspirations and Settlement, 88 CORNELL L. REV. 1, 7 (2002).

53. Cf. Lucian Arye Bebchuk & Andrew T. Guzman, How Would You Like to Pay for That? The Strategic Effects of Fee Arrangements on Settlement Terms,
“patient” in settlement negotiations than taxpayers with attorneys are.54

E. Do Attorneys Bring Greater Objectivity to Litigation Decisions?

Cognitive biases—“systematic errors in judgment and prediction”55—may affect litigants' decisionmaking.56 Cognitive biases that may affect decisions such as whether to accept a settlement offer include (1) optimism bias, which is the systematic tendency to overestimate the strength of one's own case;57 (2) risk-aversion or risk-seeking behavior;58 (3) “aspirations” (high hopes) with respect to settlement amounts;59 and (4) regret aversion, which

1 HARV. NEGOT. L. REV. 53, 54 (1996) (“A client whose lawyer is paid on an hourly basis must pay more when her lawyer works more hours. Because every hour spent by the lawyer at trial reduces the net payoff to the client, the client will be eager to have the case resolved in negotiation, rather than at trial.”).

54. See Korobkin, supra note 52, at 10. In the basic economic model of litigation, the more patient party should capture more of the surplus generated by settlement. See id. at 10-11; infra notes 148-49 (explaining this model). Of course, the IRS, as an administrative agency, does not bear its own costs. In addition, the IRS’s costs may be relatively fixed regardless of whether a particular case takes more or less time to resolve. See Lederman, supra note 13, at 342 & n.148. The importance of litigant patience to settlement timing is discussed below. See infra note 165 and text accompanying notes 165-70.

55. Ian Weinstein, Don't Believe Everything You Think: Cognitive Bias in Legal Decision Making, 9 CLINICAL L. REV. 783, 784 n.2 (2003); see also Daniel Kahneman & Amos Tversky, Prospect Theory: An Analysis of Decision Under Risk, 47 ECONOMETRICA 263 (1979); JUDGMENT UNDER UNCERTAINTY: HEURISTICS AND BIASES (Daniel Kahneman et al. eds., 1982).


58. See infra text accompanying notes 70-71, 153-54.

59. See Korobkin, supra note 52, at 3 (“The term ‘aspiration’ is defined here as the ideal target settlement sum, or set of terms, for which a litigant strives in negotiations, although achieving that target provides no discontinuous external benefit.”). A plaintiff's financial settlement aspiration is the target amount the plaintiff hopes to receive, as distinct from a “reservation price,” which, in the
is the desire to avoid feelings of regret associated with learning that one passed up what turned out to be a superior outcome.60

Professors Russell Korobkin and Chris Guthrie "contend that lawyers are more likely than litigants to apply an expected financial value analysis to the settlement-versus-trial decision, whereas certain cognitive and social-psychological phenomena that can distract from expected value analysis are more likely to influence litigants."61 By contrast, Professor John DiPippa argues that:

[Playing a lawyer may not avert cognitive error if both lawyer and client misperceive the underlying level of risk. Moreover, cognitive errors persist even with learning. Learning requires feedback and many decisions do not lend themselves to

case of a plaintiff, is the minimum the plaintiff will accept. Korobkin found evidence of an aspiration effect in an experiment with law students; students provided with high aspirations in the experiment tended to have higher reservation prices than students provided with a low aspiration. See id. at 38-40. He also found evidence that subjects given a low aspiration were more likely to accept a settlement above the stated reservation price (rather than demand more) than were subjects given the same offer and the same reservation price, but a high aspiration. See id. at 51-52.


This branch of cognitive theory is built on the unremarkable premise that we have a tendency to kick ourselves when a decision goes wrong—not entirely because of the result, but also because there was something else we could have done that would have turned out better (or so we think).


even on the old Monty Hall game show, Let's Make a Deal, participants were typically reluctant to switch the door they initially picked (so as to avoid the dread feeling of regret should their initial choice have been correct), despite the fact that the structure of the game made accepting the offer to switch a significantly better strategy.


61. Korobkin & Guthrie, supra note 21, at 82; cf. Lynn A. Baker, Commentary, Facts About Fees: Lessons For Legal Ethics, 80 TEX. L. REV. 1985, 1989 (2002) ("[T]he defendant-client has likely hired the attorney to provide precisely this sort of 'expert' information [on the optimal amount and timing of settlement offers], and is therefore highly likely to heed the attorney's (potentially self-interested) recommendation regarding the timing and amount of any settlement offer.").
feedback or are self-fulfilling. This is especially true in legal counseling when many decisions cannot be revised after assessing the consequences or are not subject to accurate assessment.  

Korobkin and Guthrie admit that experts generally are as prone to cognitive biases as lay people are. However, they counter those findings with an argument that the analytical skills of lawyers, combined with their legal training, might lead them "to analyze legal conflicts carefully and unemotionally rather than to react to them viscerally... Perhaps, then, lawyers approach decisions from a different perspective than most other people or are better able to learn from their experiences than other professionals, or both."  

Another important aspect of attorneys representing clients is that they are agents rather than principals, as discussed supra in Part I.C. Even if a lawyer acting on his or her own behalf may be as prone to cognitive biases as nonlawyers, those biases may be reduced when representing another. The old adage, "one who is his own lawyer has a fool for a client," may reflect the notion that litigants are generally very emotionally invested in the outcomes of their own cases. In addition, attorneys, as repeat players, benefit from diversification of their litigation portfolios, while pro se litigants typically do not. Both diversification and greater emotional

62. John M.A. DiPippa, How Prospect Theory Can Improve Legal Counseling, 24 U. ARK. LITTLE ROCK L. REV. 81, 92 (2001). Another article explains that certain "explanations for settlement reflect the cultural, cognitive, and psychological or affective orientations of the disputants themselves, as much as the circumstances of the individual case, or the advice of their lawyer." Julie Macfarlane, Why Do People Settle?, 46 MCGILL L.J. 663, 669 (2001). Professor Macfarlane adds that "[t]hese types of explanations are of course of even greater significance where the client is unrepresented." Id. at 669 n.13.  

63. Korobkin & Guthrie, supra note 21, at 86. But cf. Garvin, supra note 60, at 419 ("[L]earning [as a means of overcoming cognitive biases] works, at least some of the time and for some of the subjects.").  

64. Korobkin & Guthrie, supra note 21, at 87-88; but cf. Chris Guthrie et al., Inside the Judicial Mind, 86 CORNELL L. REV. 777, 784 (2001) (finding that judges, like lay people, are susceptible to cognitive biases).  

65. See supra text accompanying notes 47-51.  

66. See Faretta v. California, 422 U.S. 806, 852 (1975) (Blackmun, J., dissenting) (referring to it as an "old proverb").  

67. Cf. Huang, supra note 37, at 75 ("[E]ven if... litigants themselves fail to be sequentially rational due to, for example, cognitive difficulties, they hire lawyers who provide not only legal knowledge and expertise, but also negotiating experience and professionalism.").
distance should facilitate more objective decisionmaking in each individual case. 68

Korobkin and Guthrie argue that there are two different ways in which attorneys can work to reduce psychological barriers to the settlement of lawsuits: “First, they can attempt to negotiate in a manner that prevents the barriers from being constructed in the first place. Second, because it is highly unlikely that attorneys will successfully avoid all psychological barriers, attorneys can work to minimize the effect of already-erected barriers on settlement behavior.” 69 For example, because people generally are risk-averse when choosing between options framed as “gains” but risk-seeking when choosing between options framed as “losses” and have a stronger reaction to losses than to gains, 70 an attorney representing a defendant may reframe the litigation for the client to help the client perceive settlement opportunities as gains rather than losses. 71

Professors Korobkin and Guthrie conducted a study involving a hypothetical litigation scenario in which undergraduate students were asked to imagine themselves as the plaintiff and practicing attorneys were asked to imagine themselves as the plaintiff's lawyer. They found that

the litigants as a class appeared to take into account whether the settlement offer appeared to be a gain or loss from a pre-accident reference point, even when doing so caused them to reject the option that would maximize their expected financial return from litigation, while the lawyers apparently did not. 72

Similarly, “the opening offer . . . had a statistically significant effect on the likelihood that litigant subjects would accept the final settlement offer, but it did not have a significant effect on the likelihood that lawyer subjects would advise their clients to accept

68. Cf. Rhee, supra note 51, at 55 (because attorneys, unlike most clients, have a litigation portfolio, they may be less risk averse and therefore obtain more favorable results than an unrepresented litigant would).


70. See Kahneman & Tversky, supra note 55, at 263.

71. See Rachlinski, supra note 56, at 147, 171-72 & n.219; see also DiPippa, supra note 62, at 100, 102-03. The same effect may be true in Tax Court litigation, where the taxpayer is the one who stands to have to make a payment. See infra notes 151-55 and accompanying text.

72. Korobkin & Guthrie, supra note 21, at 101.
the offer,"73 demonstrating that litigants were more influenced than attorneys were by "anchors."74

The results of the Korobkin and Guthrie study suggest that lawyers may evaluate settlement offers differently from the way litigants do.75 In order to test whether attorneys can in fact reduce clients' cognitive biases, using litigation scenarios in which undergraduate students were asked to imagine that they were plaintiffs who had received a settlement offer, Korobkin and Guthrie tested four possible techniques, all in the form of explanations or counseling purportedly provided by the student subject's lawyer. The techniques consisted of: (1) an explanation about "the way psychological factors have been found to operate in other contexts,"76 (2) an explanation of both the positive and negative aspects of the settlement offer; (3) a recommendation to accept the offer, based on expected value analysis; and (4) a recommendation of settlement, without explanation.77 They found that all four techniques "increased the propensity of litigant subjects to favor settlement"78 and "that all four strategies produced remarkably similar results."79

73. Id. at 105 (footnote omitted).
74. See Amos Tversky & Daniel Kahneman, Judgment Under Uncertainty: Heuristics and Biases, 185 Sci. 1124, 1128 (1974) ("In many situations, people make estimates by starting from an initial value that is adjusted to yield the final answer . . . . [The] adjustments are typically insufficient. That is, different starting points yield different estimates, which are biased toward the initial values. We call this phenomenon anchoring.") (footnote omitted). Korobkin & Guthrie's study found similar results with respect to "equity seeking," Korobkin & Guthrie, supra note 21, at 111-12, which is the attempt to maintain equity in relationships, id. at 108.

75. This may be because of lawyers' training and expertise, as Korobkin and Guthrie suggest. See supra text accompanying notes 61-64. It also may be because attorneys, as agents rather than principals, may be less likely to experience some of the particular cognitive biases that the parties themselves do, as posited in text accompanying notes 64-67. Korobkin and Guthrie's study did not distinguish between the two possibilities because it did not test how practicing attorneys would respond to the hypothetical scenarios if they were asked to imagine themselves as plaintiffs rather than as plaintiffs' attorneys (or how students would respond if asked to imagine themselves acting on behalf of someone else). Nonetheless, the reason that attorneys did not succumb to the cognitive bias tested does not particularly matter, given that the role they were asked to play in the experiment (attorney) is the same one they have in litigation.

76. Korobkin & Guthrie, supra note 21, at 115.
77. Id. at 116-18.
78. Id. at 119.
79. Id. at 119-20.
Thus, the study results suggest that attorneys may be able to influence litigants’ evaluations of settlement opportunities.

Of course, attorneys may suffer from their own biases that may affect their behavior. Attorney biases, not experienced by the litigants themselves, would be a form of agency cost. For example, in Tax Court litigation, attorneys may suffer from regret aversion in spite of the fact that they will not be liable for any taxes due. That is, attorneys can suffer regret at failing to obtain a trial outcome as favorable as a settlement that was offered. In fact, an attorney in that situation may risk non-payment of fees, the loss of future business from that client, reputational harm, and, in an extreme case, a possible legal malpractice suit.

It is also possible that attorneys could exploit clients’ cognitive biases for their own ends, which would also be a form of agency cost. For example, an attorney who wants to take a case to trial for his or her own reputational or fee-related reasons might reframe gains from settlement opportunities as losses in order to encourage risk-seeking behavior on the part of the client. However, the results of Professor Leandra Lederman’s prior study of Tax Court litigation suggest that, at least on average, attorneys do not either avoid trying cases or try cases disproportionately; the presence of an attorney for the taxpayer did not have a statistically significant effect on whether or not a case went to trial.

80. See supra Part I.C (discussing agency costs).

81. Cf. Korobkin & Guthrie, supra note 21, at 123 (“An hourly fee lawyer who calculates that his reputation would be harmed more by losing a trial than it would be enhanced by winning a trial might favor settlement after all, despite his immediate financial incentive to favor trial.”) (footnote omitted).

82. See Coyne, supra note 22, at 387 (“A Champion-style lawyer] will assure the client that there is no immediate risk and will discuss the route to victory, with the predictable, and intended, effect of diminishing the client’s pain. The client then feels comfortable with the status quo, may begin to see the future choice as involving loss rather than gain, and may begin to prefer the risk of trial to the certainty of a settlement.”); Rachlinski, supra note 56, at 172 (“An avaricious defense attorney who works on an hourly rate may portray all settlements as losses so as to encourage the risk-seeking proclivities of the client. After all, the defense attorney is the principle beneficiary of risk-seeking decisions in litigation. Likewise, a plaintiff’s attorney, operating on a contingency fee and interested in a quick settlement, may encourage the client’s inherent risk-aversion.”). In theory, such behavior could delay settlements in cases that settle, but, as discussed below, analysis of the data did not find such delay. See infra text accompanying notes 171-72.

83. See Lederman, supra note 13, at 338. In the current study, the coefficient of the Attorney variable was not significant in the first stage of the selection regressions, similarly indicating that the fact of representation does not have a statistically significant effect on whether or not a case settles.
II. THE EFFECTS OF ATTORNEYS ON FINANCIAL OUTCOMES

For lawyers to earn their keep, one would expect that they obtain better outcomes for their clients than unrepresented litigants achieve themselves. And, in theory, the characteristics of representation, discussed above, generally should improve litigants' financial outcomes in tried cases, as discussed infra in Part II.A.

A. Attorneys' Effects on Financial Judgments

Most notably, as experts and repeat players in the court system, litigating attorneys should have better knowledge than unrepresented litigants of court rules and procedures and better access to information about what the opposing party or judge likely

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84. Clients do pay for lawyers' assistance, which indicates that they believe that attorneys add value. Some of the value that an attorney adds may consist of saving time for the client because of the attorney's greater familiarity with the dispute-resolution process. See G. Heileman Brewing Co. v. Joseph Oat Corp., 871 F.2d 648, 657 (7th Cir. 1989) (Posner, J., dissenting) ("One reason people hire lawyers is to economize on their own investment of time in resolving disputes."). An attorney may also help the client manage the psychological difficulties of dispute resolution. See Marc Galanter, The Day After the Litigation Explosion, 46 MD. L. REV. 3, 9 (1986) ("For plaintiffs and defendants alike, litigation proves a miserable, disruptive, painful experience. Few litigants have a good time or bask in the esteem of their fellows—indeed, they may be stigmatized.") (footnotes omitted); cf Korobkin & Guthrie, supra note 21, at 101 ("On the few occasions that lawyers [studied, in deciding whether to accept a settlement] referred to considerations other than the expected monetary values of the settlement offer and potential trial verdicts, they mentioned the hidden financial and emotional costs of the litigation process.").

85. See supra Part I.

86. Tried cases and settled cases are discussed separately because attorneys' effects on judges may not be the same as their effects in negotiations with the IRS.

87. Cf. Kritzler, supra note 6, at 14-15 (explaining "three subdimensions of expertise").

88. Cf. Alison Watts, Bargaining Through an Expert Attorney, 10 J.L. ECON. & ORG. 168, 172 (1994) (explaining that the attorney in her model, "is regarded as an expert because she can learn part of the defendant's private information at a fraction . . . of its cost to the plaintiff"). Information about prior settlements might help an attorney hone in on a likely settlement range. See Blanca Fromm, Comment, Bringing Settlement Out of the Shadows: Information About Settlement in an Age of Confidentiality, 48 UCLA L. REV. 663, 672 (2001). Greater accuracy in determining the settlement range should both increase the frequency of settlement and result in better settlement outcomes. See id.
will do. Accordingly, lawyers should have more accurate information than pro se litigants do about likely outcomes at trial.\textsuperscript{89} Herbert Kritzer found, in a context somewhat analogous to Tax Court litigation—hearings before the Wisconsin Tax Appeals Commission—that the substantive and procedural expertise of tax attorneys made them far better advocates than unrepresented taxpayers or nonlawyer tax specialists.\textsuperscript{90} Experience and expertise may be particularly helpful in Tax Court cases, where the IRS is always represented and, in fact, is represented by counsel who routinely sees numerous similar cases;\textsuperscript{91} the IRS benefits from an asymmetry in expertise and familiarity with the Tax Court when facing an unrepresented taxpayer.\textsuperscript{92} Similarly, if attorneys are better decisionmakers than the litigants themselves because attorneys succumb to cognitive biases less often, that, too, could result in better outcomes for represented taxpayers.\textsuperscript{93}

\textsuperscript{89} See Stephen M. Bundy & Einer R. Elhauge, Do Lawyers Improve the Adversary System? A General Theory of Litigation Advice and Its Regulation, 79 CAL. L. REV. 313, 332 (1991) ("Lawyers know more than clients about whether information about primary conduct is favorable, unfavorable, or irrelevant. Lawyers also know more about the available procedures and techniques for investigation, presentation, withholding, and suppression, about the sanctions applicable to clients' evidentiary conduct, and about whether information is favorable, unfavorable, or irrelevant on the issue of whether evidentiary sanctions should be imposed.").

\textsuperscript{90} KRITZER, supra note 6, at 82-84, 108-09; cf. Richard N. Block & Jack Stieber, The Impact of Attorneys and Arbitrators on Arbitration Awards, 40 INDUS. & LAB. REL. REV. 543, 553-54 (1987) (finding that in arbitration of discharge cases, parties fared better with attorneys than without them, particularly if the other side was unrepresented, but when both parties proceeded pro se, arbitration awards did not differ significantly from cases in which both parties were represented); Thomas L. Eovaldi & Peter R. Meyers, The Pro Se Small Claims Court in Chicago: Justice for the "Little Guy"?, 72 NW. U. L. REV. 947, 987 tbl.VIII (1978) (when defendant was represented, plaintiff won 68.8% of cases; when defendant proceeded pro se, plaintiff won 85.4% of cases).

\textsuperscript{91} See I.R.C. § 7452 (LexisNexis 2006) (requiring IRS Chief Counsel or his delegates to represent the IRS in all Tax Court actions); cf. Galanter, supra note 30, at 107 fig.1 (labeling the IRS as a "repeat player"). As a repeat player, the IRS faces higher stakes. See supra text accompanying notes 30-32.

\textsuperscript{92} Cf. Fromm, supra note 88, at 673 ("[O]ppotunities for strategic bargaining are enhanced if an attorney possesses more information about settlement than his opposing counsel.").

\textsuperscript{93} For example, if an attorney discourages risk-seeking behavior by a client who had viewed settlement offers as losses, the client may be willing to make an offer to the IRS in a case when a pro se taxpayer would not, and this might ultimately result in a better settlement outcome for the represented taxpayer.
Agency costs occasioned by the presence of attorneys could also result in a better financial outcome of the case—at least in gross, before attorneys’ fees are considered. That is, if an attorney devotes more time to a matter than a pro se taxpayer would (because of the incentive that hours-based compensation provides), the attorney may be better prepared for trial than a pro se taxpayer would be and therefore obtain a better outcome for the client. Similarly, if an attorney makes motions a pro se taxpayer might not make, that might improve the outcome for the taxpayer by limiting the issues in the case, for example. The flip side of this is the transaction cost of attorney time, which may lead clients to try to cabin attorneys’ efforts.

The results of the analysis of the effect of attorneys on trial outcomes are reported in Table 1. The Attorney variable is the principal focus of the analysis. Its estimated coefficient shows the direction and magnitude of any effect on the outcome of the presence of an attorney for the taxpayer, and its p-value shows whether the result is statistically significant. The financial outcome of a Tax Court case is the amount of the tax “deficiency” (essentially, the amount of tax understated), or, occasionally, the amount the

94. A study of the effect of representation on non-adversary disability hearings found that attorneys were more likely to make use of procedural opportunities, and that representation provided an advantage, but that the advantage generally was not linked to use of the procedures studied. See Popkin, supra note 7, at 1028-35.

95. As discussed in the Appendix, the study used multiple regression analysis to isolate the effect of the presence of taxpayer counsel on the outcome in question—here, the IRS’s recovery ratio. The regressions generally use the statistical technique of Ordinary Least Squares, which assumes a linear relationship between the outcome examined and the explanatory variables included in the equation. See infra note 190 and accompanying text. Table 1 shows the variables included in the regression; the coefficient of each variable, which reflects the direction and magnitude of the effect of that variable, and the “p-value” for each variable’s coefficient, which represents the probability that the relationship of the particular variable to the outcome under consideration is a chance result. A p-value of 0.05 or less (that is, the result occurs by chance five percent or less of the time) is considered statistically significant. See Kevin M. Clermont & Theodore Eisenberg, Commentary, Xenophilia in American Courts, 109 HARV. L. REV. 1120, 1127 n.17 (1996). For a typical null hypothesis that the coefficient is equal to zero, a p-value of 0.05 indicates that the ninety-five percent confidence interval (1 minus 0.05) for the coefficient does not include zero. The smaller the p-value, the less likely it is that the observed relationship occurred by chance.

96. The Internal Revenue Code defines a deficiency as the amount by which the tax imposed exceeds an amount equal to (1) the amount of tax shown on the taxpayer’s return (if a return showing an amount of tax was filed) plus (2) any
taxpayer overpaid.\textsuperscript{97} To quantify and compare the results across cases, we look at the IRS's recovery ratio—the percentage of the amount at stake that the IRS recovered.

The first column of Table 1 shows, in the left hand column, in bold type, that, in tried cases, the presence of an attorney for the taxpayer reduces the IRS's recovery ratio by 17.9 percentage points, controlling for the other variables in the equation, and that this result is highly statistically significant—the probability that the result occurred by chance is less than 1%.\textsuperscript{98} This means, for example, that if the IRS would otherwise have recovered 78% of the amount of tax it claimed was due, representation would lower that amount, on average, to about 60%. Put another way, in a tried case with the mean amount at stake—$2,979,117\textsuperscript{99}—for example, hiring an attorney would save the taxpayer an average of $533,262 in tax liability!

As further explained in the Appendix, the other variables included in the regression (listed below the Attorney variable in the Tables) control for the type of taxpayer involved in the case (individual, estate, or corporation); whether or not more than one judge was assigned to the case; whether or not the IRS asserted a deficiencies previously assessed or collected \textit{minus} (3) any tax rebates made to the taxpayer. I.R.C. § 6211(a) (LexisNexis 2006). In a typical situation, that amounts to the difference between the tax liability the taxpayer reported and the amount of tax actually due. Lederman, \textit{supra} note 19, at 185 n.14.

97. In general, when a case is in Tax Court with respect to a tax deficiency asserted by the IRS, the Tax Court may consider an overpayment claim by the taxpayer with respect to the same tax and tax period, subject to applicable statutes of limitations. \textit{See} I.R.C. § 6512(b) (LexisNexis 2006).

98. The Attorney coefficient is significant at the 0.01 confidence level. The other significant coefficients are those for (1) the amount at stake, (2) whether or not a penalty was asserted, and (3) the dummy variable taking on the value of one for cases where the trial state is different from the state of the taxpayer's residence at the time the petition was filed. As discussed in the Appendix, \textit{see infra} note 181, some of the regressions included a variable reflecting whether or not the case had been through the IRS Appeals Office before it was docketed in Tax Court. \textit{See} \textit{Internal Revenue Service, Internal Revenue Manual} § 8.1.1.3(1) (2006) ("Appeals is the Internal Revenue Service's dispute resolution forum. The Commissioner has granted Appeals authority to consider and negotiate settlements of internal revenue controversies."). If the taxpayer has not had an Appeals Conference prior to petitioning the Tax Court, the Tax Court typically will send the case to the IRS Appeals Office to discuss possible settlement. \textit{See} Rev. Proc. 87-24, 1987-1 C.B. 720. When the Appeals variable was added to this regression, the Attorney coefficient became -0.197, with a p-value of 0.002. Appeals had a coefficient of 0.031 and a p-value of 0.640.

99. \textit{See infra} Appendix, at Table 7.

100. All Tax Court trials are bench trials. \textit{See} Lederman, \textit{supra} note 13, at
penalty; the number of tax years in issue in the case; the amount at stake; the complexity of the case (using as a proxy the net number of docket entries in the case); the year in which the case was filed; the IRS region in which the city assigned for trial was located; and whether the state selected for trial differed from the taxpayer's state of residence. As explained in the Appendix, the "Selection Correction" regressions on the right side of Table 1 and subsequent tables show the effect of controlling for the "selection effect" that results because cases do not randomly settle or go to trial. In all of the regressions, we found that this selection effect did not bias the Ordinary Least Squares results.

101. See infra text accompanying notes 193-201.

102. The variables included in the first-stage selection regression, but excluded from the second stage of the Selection Correction regression in this table and subsequent tables are the following judge characteristics: a dummy variable reflecting whether or not the principal judge assigned to the case was a Special Trial Judge; dummy variables reflecting the decade of the judge's appointment to the Tax Court; and a dummy variable showing whether the judge had any background in the private sector.

103. The insignificant lambda coefficient in the second column of Table 1 suggests that this selection effect does not bias the Ordinary Least Squares ("OLS") results. See infra note 208. In addition, the results of the selection correction regression are similar to the OLS results. In particular, the presence of an attorney reduces the recovery ratio by 18.7 percentage points and the Attorney coefficient is significant at the 0.01 confidence level.
It is consistent with intuition (and good news for lawyers) that represented taxpayers achieve better outcomes in Tax Court trials than unrepresented taxpayers do. The result is also consistent

104. Because cases involving tax protestors might be idiosyncratic, for tried cases we created a dummy variable that reflected whether or not the case involved a tax protestor; tax protestors were assumed not to settle. Cases in which the opinion reflected arguments the court deemed frivolous or arguments that reflected an objection to the entire tax system or the imposition of any taxes on the individual were listed as tax protestor cases, even if the objection appeared to be made in good faith. We found twenty-two cases involving tax protestors in the sample used in the recovery ratio at trial regressions. The results were similar for the subsample that excluded those cases identified as
with Professor Herbert Kritzer's study of Wisconsin Tax Appeals Commission hearings. Kritzer found that attorneys succeeded in reversing the Wisconsin Department of Revenue's determination in thirty-six percent of the cases, while unrepresented taxpayers were similarly successful in only twenty percent of the cases.\textsuperscript{105}

Involving a tax protestor. In particular, the same variables remained significant at the 0.05 level, and with similar coefficients, as Table 1a shows.

Table 1a: Ordinary Least Squares Regression Results for IRS Recovery Ratio in Tried Cases, Excluding Tax Protestors from the Sample

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>1.329</td>
</tr>
<tr>
<td>Attorney</td>
<td>-0.140</td>
</tr>
<tr>
<td>Individual\textsuperscript{'}</td>
<td>-0.130</td>
</tr>
<tr>
<td>Estate</td>
<td>-0.379</td>
</tr>
<tr>
<td>More than One Judge</td>
<td>0.029</td>
</tr>
<tr>
<td>Any Penalty</td>
<td>0.225</td>
</tr>
<tr>
<td>Tax Years in Issue</td>
<td>-0.016</td>
</tr>
<tr>
<td>Log(100+Stakes)</td>
<td>-0.047</td>
</tr>
<tr>
<td># Net Docket Entries</td>
<td>-0.001</td>
</tr>
<tr>
<td>Year=1990\textsuperscript{''}</td>
<td>0.039</td>
</tr>
<tr>
<td>Year=1991</td>
<td>-0.009</td>
</tr>
<tr>
<td>Year=1992</td>
<td>0.052</td>
</tr>
<tr>
<td>Year=1993</td>
<td>0.051</td>
</tr>
<tr>
<td>Year=1994</td>
<td>-0.139</td>
</tr>
<tr>
<td>Central\textsuperscript{'''}</td>
<td>-0.119</td>
</tr>
<tr>
<td>Mid-Atlantic</td>
<td>-0.111</td>
</tr>
<tr>
<td>Mid-West</td>
<td>-0.087</td>
</tr>
<tr>
<td>North-Atlantic</td>
<td>-0.044</td>
</tr>
<tr>
<td>South-East</td>
<td>-0.041</td>
</tr>
<tr>
<td>South-West</td>
<td>-0.117</td>
</tr>
<tr>
<td>Trial State Differs from Residence State</td>
<td>0.180</td>
</tr>
</tbody>
</table>

Number of Observations = 167  
\textsuperscript{'} Omitted group for taxpayer type is Corporation.  
\textsuperscript{''} Omitted group for year of filing is pre-1990.  
\textsuperscript{'''} Omitted group for region is West.

Because the results were very similar whether or not the tax protestors were included and the sample is larger when they are included, they were kept in the sample.

\textsuperscript{105} KRITZER, supra note 6, at 83. In Kritzer's study, there was a mixed outcome (partial win) in 27% of the attorneys' cases and 17% of unrepresented cases. \textit{Id.} at 83 tbl.10. This result is also consistent with a meta-analysis of lawyers' effects on trial and hearing outcomes. See Rebecca L. Sandefur, \textit{Lawyer, Non-Lawyer, and Pro Se Representation and Trial and Hearing Outcomes} (2006) (unpublished manuscript at 18, on file with authors); \textit{cf.} Galanter, supra note 30, at 114 n.45 (citing prior research on the value attorneys add).
Nonetheless, because lawyers were not randomly assigned to some cases and not others, it is possible that attorneys appeared disproportionately in cases in which taxpayers already had a better shot (or, conversely, in cases that were weaker for taxpayers). In order to try to disentangle the effect of the presence of an attorney from any difference in the type of case in which the taxpayer is represented, we used Tax Protestor as an instrumental variable in a Two-Stage Least Squares regression. Being a tax protestor was correlated with pro se status but was not directly correlated with the outcome of the case. Using Tax Protestor as an instrument therefore allowed us to calculate a coefficient for the Attorney variable that adjusts for possible non-random hiring of attorneys. Table 2 compares the results of the Attorney variable in the Ordinary Least Squares regression with the Two-Stage Least Squares regression.

Table 2: Effect of Representation on IRS Recovery Ratio in Tried Cases, Controlling for Non-Random Attorney Hiring

<table>
<thead>
<tr>
<th></th>
<th>(1) Ordinary Least Squares</th>
<th>(2) Two-Stage Least Squares’</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Attorney”</strong></td>
<td>-0.179 0.002*</td>
<td><strong>Attorney”</strong></td>
</tr>
</tbody>
</table>

Number of Observations = 189

* p < 0.01

' Instrumental Variable is Tax Protestor.

" Other variables not presented to conserve space.

What the results shown in Table 2 suggest is that the effect of the presence of counsel (the Attorney variable) is actually almost twice as large as the Ordinary Least Squares regressions indicate. The coefficient in the Two-Stage Least Squares regression reflects a decrease by 35.1 percentage points in the IRS’s recovery ratio, as opposed to 17.9 percentage points, and remains statistically significant at the 0.01 level. These results suggest that, if anything, the effect of an attorney on the IRS’s recovery in tried cases is likely

106. See infra note 215 and accompanying text.

107. The other variables present in Table 1 were included in the regressions presented in Table 2, but are not listed, to conserve space. The complete results for the OLS regression are in Table 1 and the complete results for the Two-Stage Least Squares (“2SLS”) regression appear in Table 8, which is in the Appendix. The 2SLS procedure is explained in the Appendix. See infra text accompanying notes 212-16.
to be greater than the Ordinary Least Squares regression shows—an average tax reduction, in the mean litigated case, of $1,045,670 rather than $533,262.\textsuperscript{108}

In addition, the attorney’s level of experience appears to have influenced the IRS’s recovery ratio in tried cases. Table 3 shows the results when the continuous variable “Attorney’s Years of Experience” was substituted for the Attorney variable, where the outcome examined remained the IRS’s recovery ratio in tried cases.\textsuperscript{109} Table 3 shows that each additional year of attorney experience decreases the IRS’s recovery ratio by approximately 9/10 of a percentage point, and this is statistically significant.\textsuperscript{110} In addition, the Two-Stage Least Squares results for Attorney Experience also show an effect larger in magnitude than found in the Ordinary Least Squares regression. In the Two-Stage Least Squares regression, each additional year of attorney experience decreases the IRS’s recovery ratio by approximately 2.7 percentage points. Overall, the Attorney Experience results suggest that some combination of attorneys’ greater expertise, experience, and familiarity with the Tax Court and its judges improves the outcome for the taxpayer.

\textsuperscript{108} See supra text accompanying note 99.

\textsuperscript{109} There is a slightly smaller sample of cases using the Years of Attorney Experience variable than the Attorney variable—165 cases in the regression for IRS’s recovery ratio in tried cases—because there were a few attorneys whose experience we could not ascertain. When attorney experience was divided into categories for pro se, zero to ten years of attorney experience, more than ten years of experience but no more than twenty, more than twenty years of experience but no more than thirty, and over thirty years of experience, with pro se as the excluded category, the coefficients in the OLS regressions were -0.18, -0.18, -0.26, and -0.31, respectively, for each of the four groups. The p-values were 0.089, 0.032, 0.011, and 0.035, respectively.

\textsuperscript{110} In the comparable regression using the sample of 143 observations that excluded the cases identified as involving a tax protestor, the coefficient was -0.007 and the p-value was 0.027.
Table 3: Effect of Attorney Experience on IRS Recovery Ratio in Tried Cases

<table>
<thead>
<tr>
<th></th>
<th>(1) Ordinary Least Squares</th>
<th>(2) Two-Stage Least Squares</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient</td>
<td>p-value</td>
</tr>
<tr>
<td>Attorney's Years of Experience</td>
<td>-0.009</td>
<td>0.006*</td>
</tr>
</tbody>
</table>

Number of Observations = 165

* p < 0.01

' Variables other than Attorney's Years of Experience not presented to conserve space. Observations with missing values for Attorney's Years of Experience were deleted from the sample. Tax Protestors are included in the sample.

" Instrumental Variable is Tax Protestor.

Thus, the recovery ratio results suggest that both the presence of counsel and the experience of counsel have significant effects on the financial outcome of cases. In addition, that effect may be larger in magnitude than initially evident from the results of the Ordinary Least Squares regression because taxpayers do not randomly make the decision to hire an attorney. The Two-Stage Least Squares results quite logically suggest that taxpayers tend to hire counsel in cases that are weaker overall, which, in the Ordinary Least Squares regression, results in an understatemet of the magnitude of attorneys' actual improvement in taxpayers' financial outcomes.

B. Attorneys' Effects on Settlement Amounts

With one exception, the characteristics that distinguish attorney representation from unrepresented litigants generally, such as expertise, experience, and agency issues, should have a positive effect on outcomes in settled cases, for the same reasons as in tried cases, discussed above. That is, expertise, experience, an incentive to devote substantial time to the case, and objectivity should all tend to improve settlement outcomes. The exception is that represented litigants, who generally are paying their Tax Court

111. Cf. Watts, supra note 88, at 169 ("[T]he attorney may be a tougher bargainer than the client, as in Meurer (1992) . . . . [T]he attorney may [also] be an expert who can uncover part of the information concerning the defendant's negligence at a fraction of its value . . . . [T]his information can be used in the bargaining process to provide a more profitable settlement for the client.") (referring to Michael J. Meurer, The Gains from Faith in an Unfaithful Agent: Settlement Conflicts Between Defendants and Liability Insurers, 8 J.L. ECON. & Org. 502 (1992)).

112. See supra text accompanying notes 87-94.
counsel by the hour, may be less patient in waiting for settlement opportunities because they incur transaction costs pro se litigants do not.\textsuperscript{113} That might reduce the settlement amounts represented taxpayers receive, assuming that better settlement opportunities become available later in the litigation, which may be the case.\textsuperscript{114} Thus, theory is somewhat ambiguous as to what effects attorneys might have on settlement outcomes.

The data suggest that attorneys do not actually influence settlement outcomes one way or the other. Table 4 reports the results. The first column of Table 4 shows the Ordinary Least Squares results; the Attorney coefficient is negative but it is small and not statistically significant.\textsuperscript{115} The second column of Table 4 presents the Selection Correction results, which are very similar to the Ordinary Least Squares results.\textsuperscript{116}

\begin{tabular}{|c|c|}
\hline
\textbf{Table 4} & \textbf{Results} \\
\hline
Ordinary Least Squares & \\
\hline
Attorney coefficient & -0.021 \textsuperscript{115} \\
\hline
Selection Correction & \\
\hline
Attorney coefficient & -0.021 \textsuperscript{115} \\
\hline
\end{tabular}

\textsuperscript{113} See supra text accompanying note 54. The situation in a contingency fee case is distinct from the context analyzed here. Contingency fee arrangements, depending on how they are structured, can give rise to incentives for attorneys to settle for amounts that do not maximize the award to the client. See Thomason, supra note 51, at 206, 221-22 (finding, in an empirical study of a context involving “regulated contingent fees,” consistent with the notion that contingent fees can give rise to a conflict of interest, that “the results . . . indicate that workers’ compensation claimants who are represented by attorneys receive smaller settlements than do claimants not represented by counsel.”).

\textsuperscript{114} See Rhee, supra note 51, at 53 (under asset pricing model of litigation, early settlements should be lower in amount than later ones).

\textsuperscript{115} When the Appeals variable, which is discussed in notes 98 and 181, was added to the regression, the Attorney coefficient became -0.021, with a p-value of 0.760. Appeals had a coefficient of -0.001 and a p-value of 0.992.

\textsuperscript{116} The lambda coefficient is again insignificant, suggesting that the Ordinary Least Squares results are not biased. See supra note 103; infra note 208.
Table 4: Regression Results Showing Effect of Attorney Representation on IRS Recovery Ratio in Settled Cases

<table>
<thead>
<tr>
<th>(1) Ordinary Least Squares</th>
<th>(2) Selection Correction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Coefficient</strong></td>
<td><strong>Coefficient</strong></td>
</tr>
<tr>
<td><strong>p-value</strong></td>
<td><strong>p-value</strong></td>
</tr>
<tr>
<td>Constant</td>
<td>0.573</td>
</tr>
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<td><strong>Attorney</strong></td>
<td>-0.010</td>
</tr>
<tr>
<td>Individual'</td>
<td>-0.079</td>
</tr>
<tr>
<td>Estate</td>
<td>-0.044</td>
</tr>
<tr>
<td>More than One Judge</td>
<td>0.078</td>
</tr>
<tr>
<td>Any Penalty</td>
<td>-0.003</td>
</tr>
<tr>
<td>Tax Years in Issue</td>
<td>0.085</td>
</tr>
<tr>
<td>Log(100+Stakes)</td>
<td>-0.027</td>
</tr>
<tr>
<td># Net Docket Entries</td>
<td>-0.001</td>
</tr>
<tr>
<td>Year=1990&quot;</td>
<td>-0.138</td>
</tr>
<tr>
<td>Year=1991</td>
<td>-0.074</td>
</tr>
<tr>
<td>Year=1992</td>
<td>-0.119</td>
</tr>
<tr>
<td>Year=1993</td>
<td>-0.083</td>
</tr>
<tr>
<td>Year=1994</td>
<td>-0.111</td>
</tr>
<tr>
<td>Central&quot;&quot;</td>
<td>0.202</td>
</tr>
<tr>
<td>Mid-Atlantic</td>
<td>0.057</td>
</tr>
<tr>
<td>Mid-West</td>
<td>0.020</td>
</tr>
<tr>
<td>North-Atlantic</td>
<td>0.060</td>
</tr>
<tr>
<td>South-East</td>
<td>0.128</td>
</tr>
<tr>
<td>South-West</td>
<td>0.126</td>
</tr>
<tr>
<td>Trial State Differs from Residence State</td>
<td>-0.109 0.122</td>
</tr>
<tr>
<td>Lambda</td>
<td>-0.152</td>
</tr>
<tr>
<td>Number of Observations = 197</td>
<td></td>
</tr>
</tbody>
</table>

* Omitted group for taxpayer type is Corporation.  ** Omitted group for year of filing is pre-1990.  *** Omitted group for region is West.

C. Why Do Attorneys Improve Financial Outcomes in Tried but Not Settled Tax Court Cases?

The regression results discussed supra in Part II.B suggest that taxpayer representatives obtain better outcomes than unrepresented taxpayers do in cases that go to trial, implying that taxpayers' attorneys assist their clients in making their cases to Tax Court judges. Unrepresented taxpayers may fail to present evidence necessary to prove a required element in a complex section of the Internal Revenue Code, for example.

Familiarity with Tax Court procedures may be particularly important. Professor Kritzer emphasized the importance of procedure following his observation of nonlawyer representatives
advocating on behalf of clients in hearings of the Wisconsin Tax
Appeals Commission:

While I saw relatively few hearings, both my observations and
the quantitative data I collected presented a stark pattern . . . .
[T]he nonlawyer specialists I observed at tax hearings were,
with one possible exception, not effective in the hearing
context . . . . The nonlawyers whom I saw may have had
extensive substantive knowledge; what they lacked was any
sense of the procedural elements of the hearing setting.
Therefore, the hearings involving nonlawyer advocates more
closely resembled hearings where the taxpayer was
unrepresented than hearings where a tax lawyer appeared for
the taxpayer.\[177\]

Counsel who frequently litigate in Tax Court also become
familiar with the judges' behavior and expectations. They may
therefore have a better idea of what the judges find persuasive, and
develop credibility with the judges.\[118\] Thus, the results, particularly
the significance of attorney experience, support the notion that the
expertise and experience of attorneys has an important effect on the
financial outcome of litigated cases.

The lack of any statistically significant effect of counsel on the
IRS's recovery ratio in settled cases contrasts with the results in
tried cases, and suggests that counsel do not obtain better
settlements than pro se taxpayers do. This result is initially
counterintuitive in that it suggests that counsel add no value in Tax
Court cases that settle.

These results may reflect the possibility that the same
specialized training critical for making a case in court is not
required for negotiations, even for negotiating with the IRS.\[119\]

117. Kritzer, supra note 6, at 80.
118. See Haire et al., supra note 29, at 672 (“More experienced litigators
before a particular court may have reputations for veracity in factual
presentations, so that judges come to ‘trust’ particular attorneys more than
others.”).
119. Importantly, “[e]vidence of conduct or statements made in compromise
negotiations is . . . not admissible [to prove liability for or invalidity of the claim
or its amount].” Fed. R. Evid. 408. The common law rule was not so sweeping
and thereby made settlement negotiations risky for non-experts:

[T]he common law rule did not exclude evidence of admissions of fact
made in the course of compromise negotiations, unless hypothetical in
form or stated to be without prejudice. McCormick, Evidence § 274
(2nd ed. 1972). . . . The particularized treatment accorded by the
common law to factual admissions made hypothetically or without
prejudice was . . . believed to constitute an unwarranted preference for
Taxpayers may have previous negotiation experience, including experience negotiating with the IRS prior to the docketing of the case in Tax Court. In addition, IRS attorneys may attempt to assist pro se taxpayers by focusing them on the critical issues, for example. IRS attorneys may also value cases based on their experiences with taxpayer counsel and not adjust their estimates if the taxpayer is pro se (perhaps lacking a reason or incentive to do so).

By contrast, if the case is tried by a Tax Court judge, the Federal Rules of Evidence and Tax Court Rules of Practice and Procedure apply. Unrepresented litigants, in Tax Court and elsewhere, may have a very difficult time navigating the procedural rules and properly marshaling the evidence required to make a

the sophisticated and correspondingly a trap for the unwary.

WEINSTEIN'S FEDERAL EVIDENCE § 408 app. 01 (Joseph M. McLaughlin ed., 2d ed. 2006) (emphasis added). Given Federal Rule of Evidence 408, settlement negotiations generally no longer require that kind of specialized expertise.

120. Interestingly, we found that each additional case the same taxpayer was involved in for the period covered by the Tax Court's docket inquiry system reduced the IRS's recovery ratio in settled cases by 5.2 percentage points. This result was nearly significant at the 0.05 level; its p-value was 0.058. The result holds for both pro se and represented cases; the coefficient of an interaction term of represented cases and the number of cases variable was small and insignificant.

121. Unrepresented taxpayers negotiating with the IRS might even threaten to hire counsel if the case does not settle, and that threat should be credible if it is made sufficiently in advance of trial and there is enough at stake to justify the payment of legal fees. It is also possible that attorneys do in fact obtain better settlement outcomes for their clients, but that it is not evident because of the lack of a way to address in the settled subsample non-random hiring of attorneys. A study by H. Laurence Ross of insurance payments to victims of car accidents (about ninety-five percent of which were resolved by settlement) found that:

Although some of this apparent advantage is spurious—related to the kind of claims that attorneys agree to represent—the fact remains that at every level of damages and liability, the outcome in a represented case is likely to be more favorable to the claimant than that in an unrepresented case.

H. LAURENCE ROSS, SETTLED OUT OF COURT: THE SOCIAL PROCESS OF INSURANCE CLAIMS ADJUSTMENTS 141, 194 (1970). Ross asserts that "I believe that a good part of the discrepancy between the amounts received by represented and unrepresented claimants stems from the deficiency of the latter in negotiation skills." Id. at 168. He specifically points to different behavior insurance claims adjusters may use with unrepresented claimants that change the nature of the "game." See id. at 168-69.

122. I.R.C. § 7453 (LexisNexis 2006). Small tax cases, which follow more informal procedures, were not included in this study. See infra note 180.
persuasive case.\textsuperscript{123} For example, a recent newspaper article explaining the difficulties of pro se litigation in an employment discrimination case points out aspects of the litigation in which the unrepresented plaintiff was unsuccessful, including her attempts to have admitted into evidence a videotape and a document listing her job responsibilities.\textsuperscript{124} Accordingly, in formal court proceedings, there may be little substitute for the presence of an attorney, particularly a seasoned one, because of the importance of procedural expertise.\textsuperscript{125}

Thus, taken together, the results of the analysis of taxpayer attorneys' influences on the financial outcome of Tax Court cases suggest that where attorneys add the most value is where there is little substitute for their expertise and experience. Institutional features present in Tax Court litigation, particularly the lack of an incentive on the part of the IRS and its government attorney to extract as much money as possible in every case, may also be reflected in the lack of a statistically significant effect of taxpayer counsel on settlement results.\textsuperscript{126}

\begin{footnotes}
\item[123] See KRITZER, supra note 6, at 80. Tax Court Judge David Laro has commented, “most pro se taxpayers do not adequately know the Tax Court Rules or the Federal Rules of Evidence and are thus handicapped in the courtroom.” Laro, supra note 26, at 26-27. Rebecca Sandefur's meta-analysis of lawyers' effects on trial and hearing outcomes found “a strong, positive relationship between the procedural complexity of the field of law and lawyer advantage.” Sandefur, supra note 105 (manuscript at 17, 18).
\item[124] Kara Scannell, In Phoenix Court, Sales Rep Battles Aventis on Her Own, WALL ST. J., Aug. 9, 2005, at A1; see also Sandefur, supra note 105 (manuscript at 19) (describing types of fundamental errors unrepresented parties make).
\item[125] Cf. Haire et al., supra note 29, at 683 (finding support for “the proposition that advocates' process expertise plays an important role in judicial decisionmaking”).
\item[126] Interestingly, a study of administrative hearings in Aid to Families with Dependent Children (“AFDC”) cases found that “clients with attorneys appeared to be more successful at hearings, whereas self-represented clients were often successful through negotiations with the agency.” Ronald P. Hammer & Joseph M. Hartley, Special Student Project, Procedural Due Process and the Welfare Recipient: A Statistical Study of AFDC Fair Hearings in Wisconsin, 1978 Wis. L. REV. 145, 223-24; see also id. at 244. The context of the AFDC hearings is not completely analogous to Tax Court cases, however, because the hearings do not follow formal judicial procedures, such as the use of rules of evidence. See id. at 225.
\end{footnotes}
III. THE EFFECTS OF ATTORNEYS ON TIME TO CASE RESOLUTION

Part II examined the effect of attorneys on the financial outcome of Tax Court cases. The effects attorneys have on the timing of settlements and trials is also an important question, as "[t]he time it takes to resolve a dispute is an important indicator of how well the civil justice system is working." The presence of attorneys may affect the timing of trials or settlements as a result of the complexity of the case, or may reflect a disproportionate representation of cases involving large damage amounts. Attorneys may also handle cases in a manner different than unrepresented claimants do.

Several studies of the effect on disposition time of tenant representation in eviction cases found that the presence of a lawyer for the tenant increases disposition time. See, e.g., Karl Monsma & Richard Lempert, The Value of Counsel: 20 Years of Representation Before a Public Housing Eviction Board, 26 Law & Soc'y Rev. 627, 654-55 (1992) (studying cases before housing board in Oahu, Hawaii); Steven Gunn, Note, Eviction Defense for Poor Tenants: Costly Compassion or Justice Served?, 13 Yale L. & Pol'y Rev. 385, 415 (1995) (studying cases in housing court in New Haven, Connecticut). In this context, timing may be part of the substantive outcome of the case because delay in eviction from housing can be beneficial for tenants; it may allow them "to save money for, and move safely into, new housing." Gunn, supra, at 385; see also id.
of the features, discussed supra in Part I, that attorneys may bring to litigation that pro se litigants generally do not—expertise, repeat play, agency costs, transaction costs, and reduction of cognitive biases.\textsuperscript{129}

Of course, the average length of time to settlement is unlikely to be the same as the average length of time to trial.\textsuperscript{130} In particular, because cases settle much more frequently before trial than after trial,\textsuperscript{131} time to trial generally would be longer than time to settlement. Time to trial and time to settlement are therefore each considered separately, below.

A. Attorneys' Influence on Time to Trial

Once a case is filed, the time elapsed until trial depends, in the first instance, on the date set for trial. The court's procedures for setting trial dates, the volume of its caseload, and aspects of the case, such as its complexity, may be a large determining factor of the initial trial date.

In Tax Court cases, the taxpayer plays an important role in the determination of the trial date. When the taxpayer initiates the

\textsuperscript{129} Advocates may also affect litigation by their mere presence. For example, where a party has the option to proceed pro se, hiring an attorney might serve as a signal that might influence the timing of the resolution of the case.

\textsuperscript{130} We used time to trial rather than time to decision because the time between trial and decision should largely be in control of the judge and therefore less influenced by the parties or their counsel.

\textsuperscript{131} See Irvine, supra note 13, at 341 ("Nearly 95% of all federal civil cases will settle before trial, leaving less than five percent of civil cases to be appealed.") (footnotes omitted).
litigation by filing a petition opposing the IRS's determination of a tax deficiency, the taxpayer generally simultaneously designates a location for trial because, although the Tax Court is based in Washington, D.C., it hears cases in numerous cities around the country. Because the court only sits in most cities a few times a year, the location the taxpayer selects for trial likely will affect the trial date.

Once an initial trial date is set, postponement of that date should depend on the extent to which the court grants continuances and the length of those continuances. Thus, if pro se litigants tend to obtain more (or fewer) continuances than represented litigants or if they obtain continuances that are longer (or shorter) on average, representation would influence time to trial.

Attorneys' training might suggest greater success in obtaining continuances they seek. Similarly, the expertise and credibility derived from repeat appearances in the court should increase their success rate. However, experience might also lead attorneys to request fewer continuances because continuances are not routinely granted. An agency cost analysis suggests that attorneys might seek continuances so as to put more time into preparing for trial; clients, who bear those transaction costs, would try to constrain that.

132. See I.R.C. § 6213 (LexisNexis 2006); supra note 15.
133. See Tax Ct. R. Prac. & Proc. 20(a) (commencement of Tax Court case), 140(a) (“The petitioner, at the time of filing the petition, shall file a designation of place of trial showing the place at which the petitioner would prefer the trial to be held. If the petitioner has not filed such designation, the Commissioner, at the time the answer is filed, shall file a designation showing the place of trial preferred by the Commissioner.”). The Tax Court places the case on a trial calendar once the case is “at issue.” Id. R. 131(a). Tax Court cases generally are at issue after the IRS's answer is filed. See id. R. 38.
134. See id. at app. III (listing cities in which the Tax Court conducts trials).
136. In Tax Court:
A case or matter scheduled on a calendar may be continued by the Court upon motion or at its own initiative. A motion for continuance shall inform the Court of the position of the other parties with respect thereto, either by endorsement thereon by the other parties or by a representation of the moving party.
TAX CT. R. PRAC. & PROC. 133.
137. See id. (“Continuances will be granted only in exceptional circumstances.”).
On the other hand, some litigants might seek continuances as a stalling tactic because, in Tax Court, the tax ultimately determined or agreed to be due does not need to be paid until the case is resolved. 138 Attorneys might help quell that impulse because, as agents rather than principals, they themselves are not liable to the IRS and have greater objectivity.

Thus, theory does not unambiguously predict whether the time elapsed to trial will generally be longer or shorter for represented taxpayers. Table 5 reports the results of the Ordinary Least Squares regression that tested the relationship between the presence of an attorney and time to trial. As the Ordinary Least Squares coefficient for the presence of an attorney shows (in the first column of Table 5), the presence of an attorney increased the time to trial by a bit more than two months. 139 However, the coefficient is not statistically significant. The Selection Correction results in the second column of Table 5 suggest that the results are not biased by the non-random selection of cases for trial. 140 Thus, empirical analysis of this question suggests that the presence of an attorney for the taxpayer has no significant effect on the time elapsed between filing and trial.

138. See Howard A. Dawson, Jr., Should the Federal Civil Tax Litigation System Be Restructured?, 40 Tax NOTES 1427, 1427 (1988). If the taxpayer does not pay the tax or post a deposit, he or she will owe interest to the government on any amount ultimately determined to be due. See I.R.C. §§ 6601, 6621 (LexisNexis 2006).

139. That is, 19.2% of a year. When the Appeals variable, which is discussed in notes 98 and 181, was added to the regression, the Attorney coefficient became 0.235, with a p-value of 0.095. Appeals had a coefficient of 0.070 and a p-value of 0.674.

140. As discussed infra in note 208, the fact that the lambda coefficient is not statistically significant indicates a lack of bias. The results are also very similar to the OLS results; the principal changes from the OLS results are in p-values of the variables relating to the year the case was filed.
Table 5: Regression Results Showing Effect of Attorney Representation on Time to Trial

<table>
<thead>
<tr>
<th></th>
<th>(1) Ordinary Least Squares</th>
<th>(2) Selection Correction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient</td>
<td>p-value</td>
</tr>
<tr>
<td>Constant</td>
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<td>Attorney</td>
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<td>0.355</td>
</tr>
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<td>Individual'</td>
<td>0.998</td>
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<td>Estate</td>
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</tr>
<tr>
<td>More than One Judge</td>
<td>1.071</td>
<td>0.003*</td>
</tr>
<tr>
<td>Any Penalty</td>
<td>0.128</td>
<td>0.514</td>
</tr>
<tr>
<td>Tax Years in Issue</td>
<td>-0.055</td>
<td>0.192</td>
</tr>
<tr>
<td>Log(100+Stakes)</td>
<td>0.022</td>
<td>0.785</td>
</tr>
<tr>
<td># Net Docket Entries</td>
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<td>0.001*</td>
</tr>
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<td>Year=1990''</td>
<td>-0.540</td>
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</tr>
<tr>
<td>Year=1991</td>
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<td>0.047**</td>
</tr>
<tr>
<td>Year=1992</td>
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</tr>
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<td>Year=1993</td>
<td>-0.808</td>
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<td>Year=1994</td>
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<td>South-West</td>
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<tr>
<td>Trial State Differs from Residence State</td>
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</table>

Number of observations = 161

' Omitted group for taxpayer type is Corporation.
'' Omitted group for year of filing is pre-1990.
''' Omitted group for region is West.

* p < 0.01
** p < 0.05
B. Attorneys' Influence on Time to Settlement

The parties should have greater control over the timing of settlement than they do over the timing of trials because, by definition, settlement requires the parties' agreement. However, the timing of settlement is also likely correlated with trial dates. An impending trial may create a "now or never" atmosphere in settlement negotiations.

Parties may be more likely to settle later in the litigation than earlier for other reasons, as well. As the litigation advances, parties typically obtain more information about the underlying facts and the other party's case. Thus, uncertainty about the trial outcome likely decreases as the case proceeds. In addition, litigants may delay settlement discussions in the hope that the other side will initiate them because suggesting that the case settle may

141. See Gerald R. Williams, Legal Negotiation and Settlement 78 n.23 (1983) ("In Phoenix, for example, we found that over 70% of all cases were settled within 30 days of the trial date. Of those a hefty 13% settled on the day of trial itself."); Coyne, supra note 22, at 367 ("Over my first ten years as a lawyer handling civil litigation I noticed that in many of my cases the first serious settlement discussions took place shortly before trial . . . . I found a perplexing resistance to early settlement discussions—in opposing counsel, in my clients, and in myself."); Macfarlane, supra note 62, at 666 ("[S]tatistics . . . demonstrate consistently that settlement generally takes place some distance into the life of a lawsuit, often on the courtroom steps."); Charles Thensted, Litigation and Less: the Negotiation Alternative, 59 Tul. L. Rev. 76, 94 (1984) ("Many attorneys purposefully do not address the prospect of settlement until the eve of trial.").

142. See Joseph Latting, Don't Do It, 15 Rev. Litig. 387, 390 (1996) ("Like it or not, parties often do not feel the pressure to settle until the trial date approaches."). An experienced attorney may exploit that time pressure if the opponent is less experienced "in order to take advantage of the other side's expected reluctance to try the case. In this instance, the experienced lawyer will rely on the pressure of time to obtain a more favorable result for his client." Thensted, supra note 141, at 108; cf. Rickman, supra note 128, at 296 ("Contingent fees may improve lawyers' incentives to bargain hard, thereby raising settlement offers and, if high offers are forthcoming, speeding settlement.").

143. Macfarlane, supra note 62, at 666.


145. See Cornell, supra note 144, at 182; Gould, supra note 144, at 287; Mark Klock, Financial Options, Real Options, and Legal Options: Opting to Exploit Ourselves and What We Can Do About It, 55 Ala. L. Rev. 63, 87-89 (2003).
Together, these factors suggest that more settlements will occur later in the litigation process—and close to the date set for trial—than earlier in the litigation.

The effects of the features characteristic of representation on time to settlement do not clearly predict whether attorneys delay or expedite settlement because some features suggest the possibility of delays caused by representation and some suggest the opposite. First, attorney expertise might expedite settlement. That is, because attorneys generally are more familiar with litigation procedure than pro se litigants are, they are less likely to make mistakes that delay case resolution. For example, a represented taxpayer is much less likely to arrive at a settlement conference unprepared to negotiate or without critical documents. Similarly, the Gilson and Mnookin notion that repeat play increases cooperation suggests that represented taxpayers might, on average, reach quicker settlements with the IRS.147

If attorneys reduce clients’ cognitive biases, that also might expedite settlement by mitigating factors that narrow the possible settlement range—the overlap between the least the plaintiff will accept and the most defendant will pay.148 For example, an attorney might be able to temper a client’s optimism bias. This could expedite settlement by preventing the shrinking of the settlement range that optimism bias occasions.149

146. See Thensted, supra note 141, at 105-06.
147. See Johnston & Waldfogel, supra note 24, at 40.
148. For example, if each party would pay $25,000 to litigate a $200,000 claim that the plaintiff has a fifty-percent chance of winning, the gross expected value of the claim not considering the costs of litigation would be $100,000. Once those costs are taken into account, though, plaintiff stands to gain only $75,000 if she wins, and defendant stands to lose $125,000 if he loses. Any settlement of more than $75,000 and less than $125,000, if made before those costs of litigation are sacrificed, makes each party better off. Issacharoff, supra note 60, at 1269. The $50,000 settlement range in this example (between $75,000 and $125,000), not coincidentally, is the sum of the parties’ litigation costs. See Steven Shavell, Alternative Dispute Resolution: An Economic Analysis, 24 J. LEGAL STUD. 1, 11 (1995). This is a very simple example that assumes that the likelihood the plaintiff will win is known and that the damages are fixed or known. Of course, real life generally is not that straightforward. See Herbert M. Kritzer, Let’s Make a Deal: Understanding the Negotiation Process in Ordinary Litigation 58-60 (1991) (discussing an example similar to that above, but pointing out that both case valuations and transaction costs often are uncertain).
149. For example, if, in the example in note 148, the plaintiff believes that he or she has a sixty-percent probability of winning the $200,000 stakes (rather than a fifty-percent chance), the plaintiff expects a $120,000 return from trial and will not settle for less than $95,000 (rather than $75,000). Similarly, if the
In addition, attorneys—who are not themselves liable for the taxes involved in the dispute—may help taxpayers approach decisions from a more risk-neutral perspective. Unlike typical plaintiffs, who stand to gain money from a settlement, taxpayers in Tax Court cases are functional defendants who typically are trying to minimize the amount owed. Thus, like defendants, taxpayers may therefore view settlement possibilities as losses. As discussed above, people generally are risk-averse in choosing between options framed as “gains” but risk-seeking when choosing between options framed as “losses,” and, in addition, have a stronger reaction to losses than to gains.

Taxpayer litigants might therefore demonstrate risk-seeking behavior, opting to forgo an early settlement—thereby risking the possibility of trial—in the hope of obtaining a more favorable settlement (or judgment, if the case in fact fails to settle). This behavior may delay settlement in cases that settle. Attorneys could temper risk-seeking behavior on the part of taxpayer litigants, perhaps by overstating the risk involved. That could expedite settlement if it results in the acceptance of an earlier settlement offer. Similarly, an attorney might be able to reframe as a gain an
offer the taxpayer-client perceived as a loss, which might result in
the client settling more quickly.

An attorney might also help reduce unrealistic settlement
aspirations on the part of a client,\footnote{See supra note 59 and
accompanying text.} encouraging the client to accept
a reasonable settlement offer that is within the range the client
deemed acceptable but less than the client had hoped to achieve.
That might expedite settlements by increasing acceptance of earlier
offers.

Similarly, lawyers may also help temper taxpayer regret
aversion. Regret aversion suggests that litigants will try to avoid
closing off settlement options. Because rejecting an offer in the hope
of eventually settling for a larger amount increases the likelihood of
trial,\footnote{See Robert Cooter et al., Bargaining in the Shadow of the Law: A
Testable Model of Strategic Behavior, 11 J. LEGAL STUD. 225, 226, 237 (1982).} litigants may do such things as try to keep existing
settlement offers open or respond to a settlement offer with a
counteroffer rather than a simple rejection.

Some studies have cast doubt on the effect of regret aversion
with respect to losses,\footnote{See Garvin, supra note 60, at 418.} but assuming that it does have an effect and
that attorneys reduce its prevalence, represented taxpayers should
be less likely than pro se taxpayers to agree to relatively
unfavorable settlements in order to avoid trial. That phenomenon
might affect the timing of settlement. For example, the IRS might
recognize this dynamic and, when negotiating with pro se taxpayers,
threaten to demand a more favorable settlement as trial approaches,
encouraging early settlement by those taxpayers.

In contrast to the likely effect attorneys' experience, expertise
and objectivity may have in expediting settlements, an agency cost
analysis predicts delay in settlements because an attorney paid by
the hour, as tax attorneys typically are, has an incentive to devote
more time to a case.\footnote{See Johnson, supra note 25, at 576; Baker, supra note 61, at 1989
(“The hourly rate lawyer has an incentive to 'pad' her bills, whether by
exaggerating the number of hours worked, doing unnecessary or redundant
work, or using lawyers to do work that could be done more cheaply and as well
by non-lawyers.”).} Taxpayers' attorneys might make more pre-
trial motions than pro se taxpayers, for example.\footnote{Cf. Helland & Tabarrok, supra note 128, at 520 (“By spending more
time on discovery, searching for legal precedents, fielding unattractive
settlement bids, and encouraging clients to refuse early settlement offers, a
lawyer can increase the time to settlement and billable hours.”); Kritzer, supra
note 25, at 1969. Kritzer states:} These motions
would increase the cost of cases billed by the hour and could prolong resolution of the case. Accordingly, Professor Lynn Baker has argued that

the hourly rate encourages the attorney to settle the defendant-client’s case too slowly. . . . Because the hourly rate attorney’s compensation is not tied to the amount of the ultimate settlement, the potential agency problem is not the amount of the settlement, but only the speed with which a “good” settlement, from the perspective of the defendant-client, is reached . . . .

One might expect that hourly fee lawyers would be inclined to devote more time to things like legal research and writing briefs—activities that could build up hours. Contingency fee lawyers might be expected to devote more time to getting the case settled. However, the one analysis that looked at this question found no evidence supporting differences in work content that was related to the fee arrangement.

Id. (citing HERBERT M. KRITZER, THE JUSTICE BROKER: LAWYERS AND ORDINARY LITIGATION 121-23 (1990)). Kritzer also found that lawyers paid by the hour may devote more time to small cases than their contingency fee counterparts but that the reverse may be true for big cases. Id. at 1968; Herbert M. Kritzer et al., The Impact of Fee Arrangement on Lawyer Effort, 19 LAW & SOC’Y REV. 251, 266-67 (1985).

161. See, e.g., Baker, supra note 61, at 1988; Gilson & Mnookin, supra note 12, at 528; Korobkin & Guthrie, supra note 21, at 123 (“Hourly fee arrangements . . . might impede settlement because the time required to stage a trial enriches the lawyer while the client bears the attendant financial risk.”); Geoffrey P. Miller, Some Agency Problems in Settlement, 16 J. LEGAL STUD. 189, 203 (1987) (“[If] the attorney controls the settlement decision . . . a purely rational and self-interested attorney would never settle an hourly fee case in which he or she is working for a profit.”).

162. Baker, supra note 61, at 1988 (second emphasis added). She adds that “the hourly rate lawyer is [also] likely to be (self-interestedly) optimistic in assessing (or at least conveying to the client) the defendant-client’s expected net gain from going to trial.” Id. at 1989. A client bearing those hourly costs has an incentive to monitor the attorney to minimize unnecessary time expenditures. See supra note 47. However, monitoring is likely to be imperfect, particularly because lawyers have expertise that most clients do not, so it may be hard for clients to evaluate lawyers’ decisions. See Benjamin Hoorn Barton, Why Do We Regulate Lawyers? An Economic Analysis of the Justifications for Entry and Conduct Regulation, 33 ARIZ. ST. L.J. 429, 465 (2001) (“Because clients may not be able to assess the quality of the legal services they receive, the traditional responses to agency costs—express contractual protection, closer monitoring of the agent, or a later lawsuit—are insufficient.”); Cohen, supra note 47, at 280 (“Some scholars have argued that . . . [agency] cost temptations are even greater for lawyers. The reasons they have suggested for this phenomenon are that lawyers’ specialized expertise makes their recommendations about what legal
However, note that a lawyer's incentive to maximize fees is portfolio-based, rather than based on each case in isolation. A busy lawyer faces opportunity costs for each additional hour worked because it is not possible to work an infinite number of hours; an additional hour of work requires sacrificing an hour of leisure (or sleep). Accordingly, it is primarily attorneys who are not working to capacity who would have an incentive to bill additional hours prior to settling a case. In addition, delay or excessive billings can entail reputational costs (as can neglecting cases).

The transaction costs of litigation also may affect the timing of settlement by influencing how long a party can hold out for a better settlement opportunity. Professors Paul Fenn and Neil Rickman employed a multi-stage model of tort claim litigation in which they postulated that both lower legal costs for both sides and uncertainty over the amount at stake (an asymmetric information issue) should delay settlements. In their empirical study of personal injury claims against a British auto insurer’s policy holders, they found that cases believed by the insurer to be more costly for the plaintiff were settled more quickly. They point out that the “results are quite intuitive: the parties seek to settle earlier the more costly it becomes to prolong the case.”

Because taxpayers paying attorneys services the client needs and how well those services are provided particularly difficult to monitor and evaluate, even after the legal services have been rendered, and that the misuse of information is harder for clients to police than the misuse of physical assets entrusted to an agent’s care.” (footnotes omitted).

164. Id. This is particularly true with respect to clients for whom the lawyer undertakes or hopes to undertake ongoing representation. Interestingly, an empirical study by Jason Scott Johnston and Joel Waldofgel found that “cases that involve (contemporary) classmates are slower, and more likely to be tried, than cases that involve nonclassmate attorneys . . . . It may indicate that these attorneys are ‘cooperating’ by slowing down case resolution, against the interests of their clients.” Johnston & Waldofgel, supra note 24, at 55-58. They explain that “this may represent the peculiar strategic incentives that face attorneys who have established reputations long before they litigate against one another.” Id. at 55. Attorney “cooperation” of this type is a form of agency cost.
165. See Russell Korobkin, Aspirations and Settlement, 88 CORNELL L. REV. 1, 10 (2002) (discussing litigant “patience”). In the basic model of suit and settlement, the more patient party should capture more of the surplus generated by settlement. See id. at 10-11; see also supra note 54 and accompanying text.
167. See id. at 619-20.
168. Id. at 627.
169. Id.
by the hour face greater increased transaction costs as the litigation proceeds from one stage to the next than do pro se taxpayers, represented taxpayers will have an incentive to settle earlier.\textsuperscript{170}

Thus, it is not clear as a theoretical matter, whether attorneys tend to expedite or delay settlement. Table 6 reports the results of the Ordinary Least Squares regression that considered the relationship between the presence of an attorney for the taxpayer and time to settlement. In the first column of Table 6, the Ordinary Least Squares coefficient for Attorney is negative, suggesting that the presence of taxpayer counsel decreased the amount of time it took a settled case to settle. However, the p-value of the Attorney variable shows that the coefficient is not statistically significant.\textsuperscript{171} The second column of Table 6 presents the Selection Correction regression results; the coefficient on the Attorney variable is not statistically significant there, either.\textsuperscript{172} Therefore, it appears unlikely that the presence of taxpayer counsel reduces time to settlement.

\textsuperscript{170} Cf. \textit{id.} ("[W]hen the insurer's perception of the plaintiff's legal costs per day increases relative to the initial estimate, the settlement hazard rises, and delay is therefore reduced.").

\textsuperscript{171} The p-value of the Attorney coefficient is 0.208. When the Appeals variable, which is discussed in notes 98 and 181, was added to the regression, the Attorney coefficient became -0.023, with a p-value of 0.879. Appeals had a coefficient of 0.336 and a p-value of 0.119. The presence of an additional judge is correlated with an increase of more than 4.5 months in time to settlement. The number of net docket entries in the case is also positively related to the time to settlement. Each docket entry corresponds to almost a one-month increase in time to settlement. And finally, cases filed by estates and cases filed later in the sample period settle more quickly than cases filed earlier in the sample period. The fact that cases filed later in the sample period settled more quickly than cases filed earlier in the sample period may be a reflection of the fact that the Tax Court's caseload declined substantially during that time, presumably reducing the workload of both Tax Court judges and IRS counsel. IRS data reflects the following Tax Court “inventory” for fiscal years 1990 through 1994 (in thousands of dockets): 54.1 in 1990, 50.7 in 1991, 46.7 in 1992, 42.1 in 1993, and 32.5 in 1994. \textit{January 2001 IRS Report, supra} note 14, at 3.

\textsuperscript{172} The results of the Selection Correction regression suggest that the Ordinary Least Squares coefficient may be biased downward (overly negative) because the coefficient on the Attorney variable in the Selection Correction regression is smaller in magnitude. However, the Attorney variable in the Selection Correction regression also has a higher p-value. The lambda coefficient is not significant, though it is close to significance at the 0.05 level. An insignificant lambda coefficient suggests that the OLS coefficients were not affected by selection bias. \textit{See infra} note 208.
Table 6: Regression Results Showing Effect of Attorney Representation on Time to Settlement

<table>
<thead>
<tr>
<th></th>
<th>(1) Ordinary Least Squares</th>
<th>(2) Selection Correction</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient</td>
<td>p-value</td>
</tr>
<tr>
<td>Constant</td>
<td>1.195</td>
<td>0.078</td>
</tr>
<tr>
<td><strong>Attorney</strong></td>
<td>-0.195 ** 0.208**</td>
<td><strong>Attorney</strong></td>
</tr>
<tr>
<td>Individual'</td>
<td>-0.123</td>
<td>0.628</td>
</tr>
<tr>
<td>Estate</td>
<td>-0.450</td>
<td>0.067</td>
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<tr>
<td>More than One Judge</td>
<td>0.198</td>
<td>0.559</td>
</tr>
<tr>
<td>Any Penalty</td>
<td>-0.095</td>
<td>0.645</td>
</tr>
<tr>
<td>Tax Years in Issue</td>
<td>-0.068</td>
<td>0.259</td>
</tr>
<tr>
<td>Log(100+Stakes)</td>
<td>0.041</td>
<td>0.437</td>
</tr>
<tr>
<td># Net Docket Entries</td>
<td>0.087</td>
<td>0.000*</td>
</tr>
<tr>
<td>Year=1990''</td>
<td>-0.590</td>
<td>0.049*</td>
</tr>
<tr>
<td>Year=1991</td>
<td>-0.521</td>
<td>0.118</td>
</tr>
<tr>
<td>Year=1992</td>
<td>-0.956</td>
<td>0.0001</td>
</tr>
<tr>
<td>Year=1993</td>
<td>-1.036</td>
<td>0.0001</td>
</tr>
<tr>
<td>Year=1994</td>
<td>-0.911</td>
<td>0.001*</td>
</tr>
<tr>
<td>Central''</td>
<td>0.240</td>
<td>0.231</td>
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<tr>
<td>Mid-Atlantic</td>
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<td>Mid-West</td>
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<td>North-Atlantic</td>
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<td>South-West</td>
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<td>0.301</td>
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<tr>
<td>Trial State Differs</td>
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<td>0.607</td>
</tr>
<tr>
<td>from Residence State</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Number of Observations = 199

' Omitted group for taxpayer type is Corporation.

" Omitted group for year of filing is pre-1990.

*** Omitted group for region is West.
C. Implications of the Empirical Study of Timing of Settlements and Trials

The lack of significance of the results with respect to timing of Tax Court case resolutions suggests that attorneys paid by the hour neither systematically delay cases nor systematically expedite them, consistent with the ambiguous predictions of theory.\(^\text{173}\) As discussed supra in Part III.A, trial dates likely are largely under the court’s control,\(^\text{174}\) and delay in the trial date likely is primarily a function of continuances.\(^\text{175}\)

It is possible that attorneys and pro se taxpayers are equally likely to obtain continuances, although they may request them for different reasons. Pro se taxpayers may seek to postpone a decision on their liability. Attorneys may at times seek continuances because of the difficulty of scheduling a trial when balancing other cases. Delay occasioned by attorney caseload would be a form of agency cost, though presumably one that would not result in an increase in legal fees. However, a Tax Court procedural rule limits that cost to clients by generally forbidding continuances based on “[c]onflicting engagements of counsel.”\(^\text{176}\)

In the end, it may be the case that, in accordance with theory, some attorneys, such as repeat representatives in Tax Court, tend to resolve cases more quickly than pro se litigants, while other attorneys, such as those less familiar with Tax Court litigation, tend to resolve cases more slowly.\(^\text{177}\) The good news in this regard is that

\(^{173}\) By contrast, one study found “that the time to settlement is 21% longer in cases that are contingency fee limited,” Helland & Tabarrok, supra note 128, at 537, which therefore presumably involve a greater proportion of hourly fee-based compensation. Id. at 519-20. As discussed in note 128, at least two studies of insurance payments to automobile accident victims found that the presence of an attorney was associated with a greater number of days until final payment. See Hammitt, supra note 128, at 62-67; Rolph et al., supra note 128, at 24-25; Ross, supra note 121, at 228-29. Attorneys in those cases typically are paid on a contingency-fee basis. See supra note 128.

\(^{174}\) See supra text accompanying notes 132-35.

\(^{175}\) See supra text accompanying note 136.

\(^{176}\) Tax Ct. R. Prac. & Proc. 133.

\(^{177}\) An alternative explanation for the lack of a statistically significant result in the settlement context is that the IRS may finalize settlements with pro se taxpayers as soon as possible but may trust attorneys to adhere to an oral settlement agreement and so may not complete the documentation until a convenient later date (such as at the calendar call for the trial session). This phenomenon would mask quicker settlements by attorneys. However, this phenomenon would not explain why there was no statistically significant difference in pro se and represented cases with respect to the timing of trial.
any notion that lawyers systematically drag cases out\textsuperscript{178} receives no support from the results of this study.

CONCLUSION

Intuitively, one might expect parties represented by experienced attorneys who are legal experts and seasoned negotiators to obtain more favorable case outcomes than unrepresented parties. Parties presumably pay for representation largely for that reason. Similarly, one might expect that attorneys influence the timing of trials and settlements through their pre-trial motions and other procedural choices, as well as by their very presence as agents and their influence on their clients' decisions.

Consistent with intuition, this study, employing a unique data set consisting of a random sample of Tax Court cases, found that taxpayer representation has a significant effect on financial outcome in cases that go to trial. Interestingly, and in accordance with intuition, the magnitude of the effect increases with the experience of the attorney and remains highly statistically significant.

Surprisingly, the study did not find similar results in settled cases. Instead, it found nothing to indicate that attorneys affect the amount of Tax Court settlements. This suggests a similarity in negotiation outcomes of attorneys and unrepresented litigants in Tax Court cases. Thus, the results suggest that taxpayers' attorneys make their greatest contributions in trials, where the party to be persuaded is a judge rather than a government attorney—and where procedural expertise carries its greatest importance.\textsuperscript{179}

\begin{flushright}
\textsuperscript{178} Cf. Gilson \& Mnookin, \textit{supra} note 12, at 510-11.

\textsuperscript{179} Although only a small percentage of Tax Court cases go to trial, the average reduction in the IRS's recovery is substantial enough that although tax attorneys in the private sector generally are paid by the hour, representation is likely cost-effective for cases with a substantial amount at stake, whether in the single litigation or because of the possible effect of a precedent on a taxpayer facing a recurring issue. The study does not directly address the question of whether it is efficient to hire an attorney. However, a rough calculation suggests that it is. As discussed in text accompanying note 107, the average tax savings from hiring counsel in a hypothetical tried case with the mean amount at stake would be $1,045,670. Assuming a five-percent likelihood of trial, as discussed in note 13, results in an expected savings of $52,284. In many cases that will exceed the cost of the taxpayer's attorney, as suggested by the amounts of attorneys' fees claimed in cases involving taxpayer litigation for recovery of those fees. \textit{See, e.g.}, Dang v. Comm'r, T.C.M. (RIA) 2002-282 (taxpayer incurred attorney's fees of $9,821 (reporter appears to have mistakenly reported this figure as $19,821); Reginald v. United States, 2001-2 U.S. Tax Cas. (CCH) 50,583 (E.D. Wash. June 29, 2001) (taxpayer sought recovery of attorney's fees of $24,174); Kremer v. Comm'r, T.C.M. (RIA) 2000-
The results of the study also suggest that taxpayers' attorneys, on average, do not have a significant effect on the timing of case resolutions. The study thus found no support for the idea that attorneys delay case resolutions where they are paid by the hour. Attorneys did not close cases any faster than unrepresented litigants did, either.

Although this study was of Tax Court cases, it should provide valuable insights for other civil litigation. The Tax Court is a useful laboratory for the study of civil litigation, given its mix of pro se and represented taxpayers, its records on settlements, and its quantifiable results. The study's results certainly support the idea that lawyers add significant value for their clients in cases that go to trial and that they do not impose unnecessary costs on clients by dragging their feet as the meter ticks.

119 (taxpayer incurred litigation costs of $14,785); Salopek v. Comm'r, T.C.M. (RIA) 1998-385 (taxpayers claimed $95,513 in litigation costs).
APPENDIX

THE VARIABLES AND STATISTICAL METHODOLOGIES

The data used in this study consist of approximately 385 Tax Court cases, about half of which settled. The cases involve individuals, estates, and corporations litigating a federal tax deficiency against the IRS. They are a random sample of cases decided mostly in the early- to mid-1990s, except that because only

180. See infra Table 7. The full data set used in this study consists of 567 cases. However, as indicated in note 182 and accompanying text, a number of cases were eliminated from the sample because they were not deficiency cases. A few cases had been closed as duplicative. Several cases were small tax cases; these were dropped from the sample because the opinions and files in those cases were not publicly available at the time the initial data was collected. See Leandra Lederman, Tax Court S Cases: Does the 'S' Stand for Secret?, 79 TAX NOTES 257 (1998). In addition, a few cases were eliminated because they remained unresolved as of July 2005. Cases missing values for any variable were not used in regressions containing that variable. See Lederman, supra note 13, app. B at 348-49. In 2001, the Tax Court put a docket inquiry system on its website. The website states that the on-line docket inquiry system covers cases from May 1, 1986 to the present. United States Tax Court: Docket Inquiry, http://www.ustaxcourt.gov/docket.htm (last visited Sept. 11, 2006). However, even the oldest cases in the data set, which were docketed in 1981, were found in the docket inquiry system. We attempted to fill in missing values from the docket inquiry system, other public sources such as the Lexis database, and from Tax Court files. However, some cases simply did not have certain information (such as the judge assigned to a case that was settled before a judge was assigned), and some information was no longer available.

181. Cases in which decision was entered based on a stipulation of the parties were coded as settled. Settlements with the Appeals Office that occur after the case is docketed in Tax Court are reflected in the data used in this study as settled cases. In other words, the study does not distinguish between cases settled with IRS counsel or with the IRS Appeals Office, so long as the settlement occurs after docketing in Tax Court. The data set does contain information about whether or not a case had an IRS appeal prior to being docketed in Tax Court, but only on a subset of the cases. We did not use the variable in the principal regressions because of the effect it would have on the sample size. Cases in which decision was entered based on an opinion of the court were coded as tried cases, even if the decision was entered without a trial, such as on a motion for summary judgment. However, cases with no trial were excluded from the regressions in which time to trial was the dependent variable.

182. Cases that did not involve a tax deficiency, such as those involving tax-exempt organizations seeking a declaratory judgment with respect to tax-exempt status, were eliminated from the sample.

183. The data were initially collected primarily in the summer of 1995 from Tax Court case files, published opinions, and other publicly available materials.
about five percent of cases go to trial, tried cases (opinion decisions) were over-sampled so that they would represent approximately half of the sample, and because of limits on the length of time the Tax Court keeps complete records in settled cases, a stratified sampling was done so that more cases were selected from certain years than others.\(^{184}\)

The few cases in which the taxpayer's representative was an accountant (or not clearly an attorney) were dropped.\(^{185}\) Similarly, cases in which an unrepresented taxpayer was an attorney, accountant, or had legal education were also excluded so that we could isolate the effects of attorney status on case outcomes.\(^{186}\) In the time to trial regressions, cases that were decided by the court without a trial (such as on summary judgment) were excluded.\(^{187}\)

\(^{184}\) See Lederman, supra note 13, app. A at 345-47. Cases were randomly selected in two ways: (1) Using randomly generated docket numbers for the years 1989 through 1994, reflecting cases filed in those years, and (2) using randomly generated numbers to select from LexisNexis printouts of Tax Court cases with opinions issued in 1990 through 1995. See id. app. A at 345. Accordingly, the filing dates of the 567 cases span 1981 through 1994. The data for these cases were augmented beginning in 2003. Some of them were tried or settled after the initial study was conducted; they were coded as such so long as they were resolved by July 2005.

\(^{185}\) See id. app. A at 346. The Tax Court retains for approximately one year the full file in settled cases. See id. The decision document and, since 2001, the information contained in the Tax Court's on-line docket inquiry system at www.ustaxcourt.gov, generally remain available after that. Using a random number generator, 100 cases docketed in 1989 were selected, eighty docketed in 1990, 100 docketed in 1991, 150 docketed in 1992, 133 docketed in 1993, and seventy docketed in 1994. Id. Some of these turned out to be opinion decisions. See id. Any docket number that turned out to be a small tax case was excluded from the sample because, at the time, the Tax Court would not grant access to files or opinions in those cases. See supra note 180.

\(^{186}\) Non-attorneys who pass a difficult examination are entitled to represent others in Tax Court. See I.R.C. § 7452 (LexisNexis 2006); TAX CT. R. PRAC. & PROC. 200(a)(3). As discussed above, because cases involving tax protestors might be idiosyncratic, many regressions were conducted both with and without the individuals identified as tax protestors included in the sample. See supra note 104. The results were similar whether or not the tax protestors were included, and the tax protestors therefore were generally retained in each sample. See id.

\(^{187}\) In the data used in this study, in the final sample used in the recovery ratio regressions, 32.12% of the taxpayers were pro se in the sense that they were not represented at any point in the Tax Court proceedings. That figure was 31.5% in settled cases and 32.8% in tried cases. In the full data set, before non-deficiency cases and cases with missing values were deleted, 42% of taxpayers were pro se.

\(^{187}\) Initially, we eliminated from the data set cases that were dismissed by
As discussed supra in the Introduction, the study examined two different types of outcomes—length of time until case resolution and the IRS's recovery ratio (the IRS's recovery as a percentage of the total amount at stake)—as well as two subsamples of cases—settled and tried. Thus, there were four separate models, with four distinct dependent variables: (1) IRS recovery ratio in tried cases; (2) IRS recovery ratio in settled cases; (3) time to trial; and (4) time to settlement. The study tested the effect of the presence of counsel for the taxpayer on each of the four outcomes. In addition, the study examined whether the attorney's years of experience affected any of these outcomes. We used the statistical technique of Ordinary Least Squares ("OLS") for each of the four models. Each of the models therefore assumed a linear relationship between the dependent variable (the outcome examined) and a number of independent variables, as follows:

\[
\text{Tax Court Outcome} = A\text{\*Attorney} + B\text{\*Independent Variables} + \text{Error Term}
\]

Assuming that none of the explanatory variables are correlated with the error term, OLS will produce unbiased estimates.

The outcome examined, which is the dependent variable, is either Time to Case Resolution (in years) or IRS Recovery Ratio (as the court (such as for lack of jurisdiction). However, the Tax Court may dismiss a case for lack of jurisdiction that would otherwise be properly be brought in Tax Court but has a technical defect, such as IRS failure to send the notice of deficiency to the taxpayer's last known address (or provide actual notice to the taxpayer). See Lederman, supra note 19, at 185-86. Dismissed cases were therefore examined for determination of whether they should be dropped from the data set; some were, but those that were in effect a victory for one party or the other were retained.

188. We treated a taxpayer as having attorney representation if an attorney was present as a representative at any point in the case, even if the attorney entered the case after the petition was filed or withdrew before decision was entered.

189. Attorney experience was calculated using year of graduation from law school (or year of bar admission where year of graduation was not available) as the starting point and the filing date of the case as the ending point. Attorney experience is therefore case-specific. It also does not necessarily reflect years of admission to the Tax Court bar. The attorney experience variable takes on the value of zero if the taxpayer is pro se.

190. See William H. Greene, Econometric Analysis 148-50 (2d ed. 1993). OLS produces a regression line that best fits the data by minimizing the sum of squared residuals, that is, the square of the difference between the observed and predicted values of the dependent variable. See id. at 149.

191. That is, the expectation of the error term, conditional on the other independent variables and the Attorney variable, is zero: \( E[\text{Error Term} \mid \text{Independent Variables, Attorney}] = 0. \)
a percentage of the stakes). The Attorney variable is a dummy variable that simply reflects the presence or absence of counsel for the taxpayer in the Tax Court case. In some regressions, the Attorney variable was replaced with Attorney’s Years of Experience (which takes on a value of zero for pro se taxpayers). The magnitude and statistical significance of A, the coefficient on that variable, is the focus of this study.

There are multiple explanatory variables included in each equation; B represents the coefficients of all of these variables. Those variables include the following:

- The log of the financial stakes, which is the sum of the deficiency claimed by the IRS and any overpayment claimed by the taxpayer. Financial stakes were slightly

192. Because the variable simply reflects the presence or absence of taxpayer counsel (1 if the taxpayer has counsel and 0 otherwise), it is a dummy variable. That is, it does not reflect a range of possible values. See Greene, supra note 190, at 229.

193. Where we knew of amounts asserted by the IRS in its answer or an amended answer, typically from an opinion in the case, we included those in the stakes. The deficiency claimed by the IRS includes the estimated value of any time-sensitive penalty, typically a penalty that is an amount equal to fifty percent of the interest on the deficiency. Those time-sensitive penalties generally applied, as reflected in a prior version of Internal Revenue Code § 6653, “beginning on the last date prescribed by law for payment of such underpayment (determined without regard to any extension) and ending on the date of the assessment of the tax (or, if earlier, the date of the payment of the tax).” I.R.C. § 6653(a)(1)(B) (Supp. IV 1982) (current version at I.R.C. § 6653(a)(1) (LexisNexis 2006)). For purposes of this study, the penalty was computed as arising on the unextended due date of the return (April 15 for individuals) and accruing until the date of the notice of deficiency. If that date was not available, forty-five days prior to the petition date was used; except when addressed to a taxpayer outside the United States, a Tax Court petition is due ninety days after the notice of deficiency was mailed. Id. § 6213(a). However, interest itself, including penalty interest (interest at an increased rate), was not included in the stakes. We tried including a dummy variable reflecting whether the IRS had asserted penalty interest, but we were missing that information on too many of the cases to include the variable in the final regressions.

194. We used the log of stakes rather than the stakes themselves because some of the stakes amounts were extremely large, and might otherwise have a disproportionate effect on the coefficient of the stakes variable. In computing the stakes, the overpayment claim amount was treated as zero if we did not have it, even if the taxpayer recovered an overpayment. The principal effect of this is on the IRS’s recovery ratio. If the recovery ratio was lower than negative 1, which could happen where an overpayment was recovered but not reflected in the stakes, it was treated as -1.
correlated with taxpayer representation.\textsuperscript{196}

- Whether the IRS asserted any penalty or addition to tax (other than a frivolous litigation penalty, which would not have been asserted had the taxpayer not litigated the case). In a sense, this variable is a proxy for case quality; the IRS might apply a penalty in cases that are relatively weaker cases for taxpayers.

- Type of taxpayer: individual, corporation, or estate.\textsuperscript{196} The identity of the taxpayer might affect the actual stakes in the case in ways not captured by the monetary stakes variable. For example, corporations might be more likely to anticipate facing the same issue in the future and thus have stakes that exceed the financial stakes in the particular litigation.

- The number of tax years in issue in the case. This is a (probably weak) proxy for complexity and also may help indicate cases in which the taxpayer faces a recurring issue and therefore higher stakes.\textsuperscript{197}

- As a proxy for complexity of the case, the number of entries between docketing and the first decision in the case in the Tax Court's on-line docket entry system, net of entries solely related to the presence of counsel ("net docket entries").

- Dummy variables for the year in which the case was filed. This helps address time effects, particularly because the Tax Court's inventory declined over the period studied,\textsuperscript{198} which should expedite case dispositions in later years.

- Whether the state in which the city selected for trial was located differed from the state in which the taxpayer resided at the time the petition was filed. These cases might be different from other cases because the taxpayer might be hoping to avoid local publicity, for example, which could also provide an incentive to the taxpayer to resolve the case

\textsuperscript{195} The correlation was approximately 0.14 in tried cases and 0.15 in settled cases.
\textsuperscript{196} Partnership cases were excluded from the sample because partnership adjustments are not directly comparable to deficiencies.
\textsuperscript{197} Of course, multiple tax years do not necessarily present the same issue.
\textsuperscript{198} See supra note 171.
quickly and as favorably as possible.

- The IRS region in which the state of trial was located. This was included because IRS attorneys reportedly differed by region in ways that might expedite or delay case resolutions and IRS recoveries, particularly in settled cases.\textsuperscript{199}

- Whether or not there was more than one judge involved in the case. Cases involving more than one judge might take longer to resolve. The value of the case might also be less predictable if multiple judges are involved, which could affect settlement outcomes as litigants “bargain in the shadow of the law.”\textsuperscript{200} The involvement of multiple judges in the case might also affect trial outcomes.\textsuperscript{201}

Table 7, below, shows the means of all of the variables discussed above, in both settled cases and tried cases, based on the sample used for the “recovery ratio” outcome regressions.\textsuperscript{202} Table 7 also

\textsuperscript{199} Cf. Robert M. Howard & David C. Nixon, \textit{Local Control of the Bureaucracy: Federal Appeals Courts, Ideology, and the Internal Revenue Service}, 13 WASH. U. J.L. & POL’Y 233, 253 (2003) (finding regional variation in proportion of business audits, correlating with Court of Appeals ideology). As in the prior study that used this data set, we used for the region variable the seven IRS regions that existed in 1995. See Lederman, supra note 13, app. C at 352. However, the prior study used the state in which the taxpayer resided at the time the Tax Court petition was filed for purposes of determining the region. For this study, we opted to determine region based on the state selected for trial, which more closely reflects which IRS attorneys handled the case. In approximately 12.5% of the cases, the region of residence and the region of trial differed, or data on one or the other was missing.


\textsuperscript{201} The model was focused on the effects of attorneys, not judges, on case outcomes. We did collect additional information on the principal judge assigned to each case but did not use those variables in the final analyses. For example, we examined the years remaining to the expiration of the judge’s term, to see if the possibility of reappointment might have an effect on the results. This variable could only apply to regular judges, not senior judges or Special Trial Judges. The subsample containing this variable was therefore very small, so this variable was not used in the final regressions. In addition, we collected information on the gender of the principal judge assigned to the case. Most of the judges were male, and this variable was not used in Professor Lederman’s prior study, so we did not include it in the judge variables used in the selection correction regressions.

\textsuperscript{202} There were 199 cases in the sample used for the settlement-time regression and 161 cases in the trial-time regression sample. The sample of tried cases used for the regression for IRS’s recovery ratio is larger than the
includes information on the Tax Protestor variable, which, as discussed below, was used as an instrumental variable in the regressions involving tried cases.\textsuperscript{203}

As Table 7 reflects, tried cases in the sample took longer, on average, to resolve than settled cases did (1.75 years rather than 1.42 years, overall, a difference of approximately four months). For both the settled and tried subsamples, cases involving an attorney took longer to resolve, on average, than cases in which the taxpayer was pro se. In the settled subsample, the average difference was approximately four months, and for the tried subsample, the average difference was approximately 6.5 months. Table 7 also shows that the IRS's average recovery ratio was higher in tried cases (approximately sixty-nine percent) than in settled cases (thirty-two percent), consistent with the notion that the IRS, a repeat player, brings to trial cases it is more likely to win and thereby obtain a favorable precedent.\textsuperscript{204}

\textsuperscript{203} As Table 7 shows, the average amount at stake was substantially higher in cases in which the taxpayer had counsel than in cases in which the taxpayer was unrepresented, for both the settled and tried groups of cases, which is consistent with the notion that it makes more economic sense for a taxpayer to hire a lawyer when the financial stakes are greater, particularly because tax attorneys generally charge by the hour. The average stakes overall and for cases involving an attorney were substantially higher for cases that went to trial than for those that settled. However, in cases in which the taxpayer was not represented, the average stakes were higher in the group that settled than in the group that went to trial. It may be that pro se taxpayers are wary of trials and that they are therefore less willing to proceed to trial when more money is at stake. That wariness could be due to lack of comfort with litigation or "regret aversion." Regret aversion is discussed in note 60 and accompanying text and text accompanying notes 155-56.

Table 7: Means/Percentages of All Dependent and Independent Variables

<table>
<thead>
<tr>
<th>Settled Cases</th>
<th>Tried Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>Pro se</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time to Settlement or Trial (Years)'</th>
<th>1.42</th>
<th>1.18</th>
<th>1.53</th>
<th>1.75</th>
<th>1.34</th>
<th>1.90</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of Stakes IRS Received&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Represented by Attorney</td>
<td>32.1%</td>
<td>28.7%</td>
<td>33.7%</td>
<td>68.7%</td>
<td>88.6%</td>
<td>59.0%</td>
</tr>
<tr>
<td>Attorney's Years of Experience&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual</td>
<td>80.2%</td>
<td>95.2%</td>
<td>73.3%</td>
<td>83.6%</td>
<td>98.4%</td>
<td>76.4%</td>
</tr>
<tr>
<td>Corporation</td>
<td>11.7%</td>
<td>3.2%</td>
<td>15.6%</td>
<td>12.7%</td>
<td>1.6%</td>
<td>18.1%</td>
</tr>
<tr>
<td>Estate</td>
<td>8.1%</td>
<td>1.6%</td>
<td>11.1%</td>
<td>3.7%</td>
<td>0.0%</td>
<td>5.5%</td>
</tr>
<tr>
<td>Number of Cases for Taxpayer</td>
<td>1.52</td>
<td>1.53</td>
<td>1.52</td>
<td>1.55</td>
<td>1.57</td>
<td>1.54</td>
</tr>
<tr>
<td>Number of Net Docket Entries</td>
<td>9.41</td>
<td>7.94</td>
<td>10.08</td>
<td>25.95</td>
<td>18.56</td>
<td>29.55</td>
</tr>
<tr>
<td>More than One Judge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year of Filing = pre-1990</td>
<td>20.3%</td>
<td>4.8%</td>
<td>19.3%</td>
<td>20.6%</td>
<td>17.7%</td>
<td>22.1%</td>
</tr>
<tr>
<td>Year of Filing = 1990</td>
<td>8.1%</td>
<td>1.6%</td>
<td>11.1%</td>
<td>16.4%</td>
<td>12.9%</td>
<td>18.1%</td>
</tr>
<tr>
<td>Year of Filing = 1991</td>
<td>10.2%</td>
<td>4.8%</td>
<td>12.6%</td>
<td>12.2%</td>
<td>11.3%</td>
<td>12.6%</td>
</tr>
<tr>
<td>Year of Filing = 1992</td>
<td>24.4%</td>
<td>37.1%</td>
<td>18.5%</td>
<td>11.6%</td>
<td>11.3%</td>
<td>11.8%</td>
</tr>
<tr>
<td>Year of Filing = 1993</td>
<td>28.9%</td>
<td>38.7%</td>
<td>24.4%</td>
<td>10.6%</td>
<td>14.5%</td>
<td>8.7%</td>
</tr>
<tr>
<td>Year of Filing = 1994</td>
<td>8.1%</td>
<td>12.9%</td>
<td>5.9%</td>
<td>3.2%</td>
<td>6.5%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Central Region</td>
<td>8.1%</td>
<td>6.5%</td>
<td>8.9%</td>
<td>13.8%</td>
<td>6.5%</td>
<td>17.3%</td>
</tr>
<tr>
<td>Mid-Atlantic Region</td>
<td>3.0%</td>
<td>4.8%</td>
<td>2.2%</td>
<td>13.2%</td>
<td>14.5%</td>
<td>12.6%</td>
</tr>
<tr>
<td>Mid-West Region</td>
<td>9.6%</td>
<td>8.1%</td>
<td>10.4%</td>
<td>9.0%</td>
<td>9.7%</td>
<td>8.7%</td>
</tr>
<tr>
<td>North-Atlantic Region</td>
<td>12.1%</td>
<td>8.1%</td>
<td>14.1%</td>
<td>8.5%</td>
<td>6.5%</td>
<td>9.4%</td>
</tr>
<tr>
<td>South-East Region</td>
<td>11.7%</td>
<td>13.3%</td>
<td>11.9%</td>
<td>11.1%</td>
<td>9.7%</td>
<td>11.8%</td>
</tr>
<tr>
<td>South-West Region</td>
<td>20.3%</td>
<td>19.4%</td>
<td>20.7%</td>
<td>14.8%</td>
<td>14.5%</td>
<td>15.0%</td>
</tr>
<tr>
<td>West Region</td>
<td>35.0%</td>
<td>41.9%</td>
<td>31.9%</td>
<td>29.6%</td>
<td>38.7%</td>
<td>25.2%</td>
</tr>
<tr>
<td>Number of Tax Years in Issue</td>
<td>1.70</td>
<td>1.35</td>
<td>1.87</td>
<td>2.54</td>
<td>2.66</td>
<td>2.49</td>
</tr>
<tr>
<td>Any Penalty Asserted by IRS</td>
<td>80.2%</td>
<td>88.7%</td>
<td>76.3%</td>
<td>67.2%</td>
<td>74.2%</td>
<td>63.8%</td>
</tr>
<tr>
<td>Stakes</td>
<td>$233,839</td>
<td>$77,494</td>
<td>$305,641</td>
<td>$2,979,117</td>
<td>$53,677</td>
<td>$4,407,285</td>
</tr>
<tr>
<td><strong>Tax Protestor</strong>&quot;&quot;&quot;&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Docketing IRS Appeal&quot;&quot;&quot;&quot;</td>
<td>17.5%</td>
<td>8.6%</td>
<td>22.9%</td>
<td>44.1%</td>
<td>31.3%</td>
<td>49.2%</td>
</tr>
<tr>
<td>Special Trial Judge</td>
<td>16.8%</td>
<td>16.1%</td>
<td>17.0%</td>
<td>23.8%</td>
<td>32.3%</td>
<td>19.7%</td>
</tr>
<tr>
<td>Judge Decade=pre-1980s</td>
<td>24.9%</td>
<td>12.9%</td>
<td>30.3%</td>
<td>28.6%</td>
<td>30.7%</td>
<td>27.5%</td>
</tr>
<tr>
<td>Judge Decade=1980s</td>
<td>65.5%</td>
<td>80.6%</td>
<td>63.0%</td>
<td>57.1%</td>
<td>53.2%</td>
<td>59.1%</td>
</tr>
<tr>
<td>Judge Decade=1990s</td>
<td>6.6%</td>
<td>6.5%</td>
<td>6.7%</td>
<td>14.3%</td>
<td>16.1%</td>
<td>13.4%</td>
</tr>
<tr>
<td>Private Sector Experience for Judge</td>
<td>81.7%</td>
<td>77.4%</td>
<td>83.7%</td>
<td>70.4%</td>
<td>66.1%</td>
<td>72.4%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>197</td>
</tr>
</tbody>
</table>

*"Rep" means taxpayer was represented by an attorney.

"The means of this variable reflect the sample used for the time regressions. The means of the other variables presented reflect the sample used for the ratio regressions.

"Values greater than 1 were reset to 1; values less than -1 were reset to -1.

"The size of the sample used in the settlement-ratio regression containing the Attorney Experience variable was 178. The size of the sample used in the trial-ratio regression containing this variable was 165.

""The Tax Protestor dummy variable was used as an instrumental variable in 2SLS regressions in tried cases.

""""The Appeals variable was not used in most regressions. The size of the sample used in the settlement-ratio and trial-ratio regressions containing this variable were 154 and 170, respectively.

There were two possible sources of bias in the OLS regressions in this study. First, Tax Court cases are not randomly selected for
settlement or trial,\textsuperscript{205} which will cause biased OLS coefficients if selection is correlated with (1) the dependent variable and (2) any independent variable in the OLS regression.\textsuperscript{206} We used a Heckman\textsuperscript{207} two-step estimation procedure to address this issue.\textsuperscript{208}

The first step of the Heckman method estimates a probit (binary choice) model, using the full sample of cases that settle and cases

\textsuperscript{205} See Lederman, supra note 13, at 332; cf. Priest & Klein, supra note 204, at 4 (explaining that, in their model, a non-random selection of lawsuits will fail to settle).

\textsuperscript{206} In other words, assume that, for cases that settle, there is some unobserved selection criterion. Assume further that the selection criterion is a linear function of some variables and an unobserved error term. (\(Z^* = W\pi + u\) where \(Z^*\) is the unobserved selection criterion, \(W\) is a matrix of explanatory variables (the OLS variables plus the variables describing the presiding judge), \(\pi\) is the matrix of corresponding coefficients, and \(u\) is the error term). If we assume that we know only the direction of the effect but not its magnitude (the sign of \(Z^*\) but not its absolute value), so that cases that settle are those where the selection criterion is positive and those that go to trial are cases in which the selection criterion is zero or negative, then there is selection bias if the unobserved error term in the OLS regressions is correlated with the error term in the selection equation, \(u\).

\textsuperscript{207} See James J. Heckman, Sample Selection Bias as a Specification Error, 47 ECONOMETRICA 153 (1979). A Heckman procedure is appropriate when the sample non-randomly omits a particular type of data. Because cases are not randomly selected for trial or settlement, both data subsamples in this study may manifest selection bias that could bias the OLS results.

\textsuperscript{208} Continuing the example in footnote 206, for cases that settle, the probability that a case settles is a nonlinear function of the independent variables in the OLS regression along with the variables describing the presiding judge. That is, \(\text{Prob(Case Settles)} = \Phi(W\pi)\), where \(\Phi\) represents the standard normal distribution. In this scenario, the OLS regression in the text, \(\text{Tax Court Outcome} = A^*\text{Attorney} + B^*\text{Independent Variables} + \text{Error Term}\) is actually:

\[
\text{Time to Settlement} = A^*\text{Attorney} + B^*\text{Independent Variables} + \text{Error Term}
\]

where the selection regression and OLS error terms are distributed bivariate normal, each with a mean of zero, the former with a standard deviation of one, the latter with standard deviation equal to \(\sigma_e\) and with \(\rho\) representing the correlation between the two error terms. In other words, \((u, \text{Error Term}) \sim \text{bivariate normal}(0,0,1,\sigma_e^2, \rho)\).

To control for this selection bias, the regression desired is:

\[
\text{Time to Settlement (Given Settlement)} = A^*\text{Attorney} + B^*\text{Independent Variables} + C^*\text{Lambda} + \text{Error Term}
\]

where \(C = \rho^*\sigma_e\) and Lambda is a non-linear function of the Probability of Settlement. This new OLS regression with Lambda included as an explanatory variable controls for any selection bias. If selection bias is not present, the coefficient \(C\) will not be statistically significant.
that go to trial. The dependent variable takes on the value of one if the case settles, and zero if the case goes to trial. The explanatory variables in this step include the explanatory variables used in the OLS equation, as well as variables related to whether or not a case settles. Professor Lederman's previous study of Tax Court case outcomes found that certain characteristics of the judge assigned to the case predict whether a case will settle or go to trial; we assume that those relationships hold here. The judge variables, which are included in Table 7, were:

- Whether or not the principal judge assigned to the case was a Special Trial Judge. Special Trial Judges are employees at will appointed by the Chief Judge of the Tax Court, unlike the regular judges, who are appointed by the President, with the advice and consent of the Senate, for renewable fifteen-year terms.

- Dummy variables for the decade in which the principal judge involved in the case was appointed to the bench.

- Whether or not the principal judge assigned to the case had private-sector experience before becoming a judge.

In the Heckman procedure, the first-step probit results are used to derive estimates of the predicted probability of selection into a subsample (such as cases that settle). A non-linear function of this estimated probability (the inverse Mill's ratio, lambda) is included in the second-step OLS regression that uses only that subsample. The second step simply includes the predicted lambda as an explanatory variable in the OLS specification, in order to correct for selection bias. If the coefficient on the predicted lambda is not significantly different from zero, this generally suggests that selection bias is not present. As reported in Tables 1 through 4, lambda was not

209. See Lederman, supra note 13, at 332; supra note 17.

210. In this study, we used the three judge variables that were found to be statistically significant in the prior study, see Lederman, supra note 13, at 332, except that for the judge's background, a dummy variable reflecting the presence or absence of private sector experience was used. Also, the prior study used data on the judge who entered the decision. This study used data on the judge involved in the case for the longest period of time, if more than one judge was involved in the case. That information was obtained from the Tax Court's on-line docket inquiry system.

211. I.R.C. § 7443(b), (e) (LexisNexis 2006) (appointment and term of office of regular Tax Court judges); id. § 7443A(a) (authority of Chief Judge to appoint Special Trial Judges).
DO ATTORNEYS DO THEIR CLIENTS JUSTICE?

statistically significant in any of the regressions, suggesting the absence of selection bias.

The second possible source of bias in the OLS regression results is that the hiring of an attorney is non-random. That is, taxpayers choose whether or not to hire an attorney. Unobserved factors may influence both the decision to hire an attorney and the outcome of the case (time involved or recovery ratio, depending on the model), presenting an endogeneity issue.\textsuperscript{212} To control for this bias requires, for each of the four models, an "instrumental variable" that was correlated with the decision to hire an attorney but not with the outcome being tested.\textsuperscript{213} That instrument would be used in the first stage of a Two-Stage Least Squares ("2SLS") model in which, in the first stage, the Attorney dummy variable is regressed on the other independent variables and the instrumental variable. Then, the predicted value for Attorney status from this first stage would be substituted for actual Attorney status in the second stage.\textsuperscript{214} For tried cases, Tax Protestor was used as an instrumental variable because tax protestors were disproportionately pro se and tax protestor status was not directly correlated with time to trial or IRS recovery ratio in tried cases.\textsuperscript{215}

The 2SLS results using the Tax Protestor variable as an instrument in time to trial and IRS recovery ratio in tried cases are reported in Table 8, below. Settled cases presented a more difficult context than tried cases for development of a suitable instrumental

\begin{itemize}
\item \textsuperscript{212} There are statistical techniques that control for selection bias and endogeneity bias together. However, the sample size did not allow us to utilize these techniques, so we addressed each source of bias separately.
\item \textsuperscript{213} A proper instrument may vary depending on the tax outcome being investigated. As an example, if there were a change in the tax law such that there was a tax deduction for attorney's fees in some years relevant to the study but not in others, a dummy variable reflecting whether or not the deduction was available might be a good instrument because it should be related to the decision whether to hire an attorney but not to IRS recovery ratio, at least in tried cases. (In settled cases, the IRS theoretically could capture part of the value to the taxpayer of the tax deduction.)
\item \textsuperscript{214} In contrast to the selection regressions, both stages of 2SLS involve only the subsample of cases that either settle or go to trial, depending on the Tax Court outcome being investigated. In calculating the standard errors of the 2SLS coefficients, the actual Attorney values are used instead of the predicted values.
\item \textsuperscript{215} The correlation between Tax Protestor and Time to Trial was -0.10, and the correlation between Tax Protestor and Trial Ratio was 0.22. The correlation between Tax Protestor and Attorney was -0.41 in the trial-ratio subsample. The correlation between Tax Protestor and Attorney's Years of Experience was -0.32 in the trial-ratio subsample.
\end{itemize}
variable because of the lack of information about the taxpayers whose cases settled. For settled cases, we tested a number of variables as instruments. However, each of these were either not related to the hiring of an attorney, were directly related to Tax Court outcomes, or both. The 2SLS results were often dramatically different from the OLS and Selection results, and often nonsensical.\textsuperscript{216}

Table 8: Two-Stage Least Squares Results for Time and Recovery Ratio Outcomes in Tried Cases

<table>
<thead>
<tr>
<th>Time to Trial: Two-Stage Least Squares</th>
<th>IRS Recovery Ratio in Tried Cases: Two-Stage Least Squares</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Coefficient</strong></td>
<td><strong>p-value</strong></td>
</tr>
<tr>
<td>Constant</td>
<td>0.751</td>
</tr>
<tr>
<td>\textit{Attorney}</td>
<td>0.000</td>
</tr>
<tr>
<td>Individual</td>
<td>1.060</td>
</tr>
<tr>
<td>Estate</td>
<td>0.623</td>
</tr>
<tr>
<td>More than One Judge</td>
<td>0.105</td>
</tr>
<tr>
<td>Any Penalty</td>
<td>0.119</td>
</tr>
<tr>
<td>Tax Years in Issue</td>
<td>0.006</td>
</tr>
<tr>
<td>\text{Log}(100+\text{Stakes})</td>
<td>-0.006</td>
</tr>
<tr>
<td># Net Docket Entries</td>
<td>0.032</td>
</tr>
<tr>
<td>Year=1990&quot;&quot;&quot;</td>
<td>-0.555</td>
</tr>
<tr>
<td>Year=1991</td>
<td>-0.357</td>
</tr>
<tr>
<td>Year=1992</td>
<td>-0.774</td>
</tr>
<tr>
<td>Year=1993</td>
<td>-0.712</td>
</tr>
<tr>
<td>Year=1994</td>
<td>-0.429</td>
</tr>
<tr>
<td>Central&quot;&quot;&quot;</td>
<td>-0.150</td>
</tr>
<tr>
<td>Mid-Atlantic</td>
<td>-0.178</td>
</tr>
<tr>
<td>Mid-West</td>
<td>-0.076</td>
</tr>
<tr>
<td>North-Atlantic</td>
<td>0.003</td>
</tr>
<tr>
<td>South-East</td>
<td>0.344</td>
</tr>
<tr>
<td>South-West</td>
<td>0.205</td>
</tr>
<tr>
<td>Trial State Differs from Residence State</td>
<td>0.183</td>
</tr>
</tbody>
</table>

Number of observations = 161

" Instrumental Variable is Tax Protestor.
"" Omitted group for taxpayer type is Corporation.
""" Omitted group for year of filing is pre-1990.
"""" Omitted group for region is West.

\textsuperscript{216} For example, using Total Number of Cases for Taxpayer as an instrumental variable, we found that the presence of an attorney for the taxpayer in settled cases increased the time to decision by approximately sixty-two years. The p-value was 0.96.
As Table 8 shows, results of the 2SLS regression using Tax Protestor as an instrument in the time to trial regression did not result in statistical significance of the Attorney variable. The results are generally very similar to the OLS results shown in Table 5. A comparison of Table 8 and Table 2 reveals that the results of the 2SLS regression in the IRS Recovery Ratio in Tried Cases show a stronger effect of the Attorney variable than in the OLS regression, while remaining highly statistically significant. These results are explained supra in Part II.A.

217. See supra text accompanying note 140.
218. Table 2 presents the comparison, but in abbreviated form.
219. None of the coefficients of the other variables are significant at the 0.05 level except for Any Penalty and Trial State Differs from Residence State, which have similar coefficients and p-values as those in the OLS regression (shown in Table 1).
220. See supra text accompanying note 108.