## THE IMPACT OF FEE ARRANGEMENT ON LAWYER EFFORT

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This paper focuses on the impact of fee arrangement on the amount of time lawyers are likely to devote to civil cases ("effort"). Drawing upon data collected by the Civil Litigation Research Project, we compare the behavior of lawyers working on an hourly fee basis with the behavior of contingent fee lawyers. Like previous work on this issue, the paper finds that fee arrangement does influence the amount of effort lawyers devote to a given case. However, contrary to previous work, the analysis indicates that the effect is not a simple effect on hours worked but a more complex effect on a number of aspects of lawyers' behavior. Together these produce an effect on hours that varies by size of case. For modest cases (with stakes of \$6,000 or less), contingent fee lawyers spend less time on a case than hourly fee lawyers. Yet we find no statistically significant evidence of a differential in effort for larger cases but rather an indication that, if there is an effect, it may be in the opposite direction.

In recent years there has been considerable discussion of the impact that various fee arrangements have on the nature of the services lawyers provide for their clients. In particular, a number of scholars have drawn on economic theory to model the effect of fee arrangements on lawyer behavior. Several of these theoretical studies reach the conclusion that lawyers paid on a contingent fee basis will spend fewer hours on a case than would be optimal for the client. They also suggest that lawyers paid on an hourly basis will put in more than the optimal number of hours. These analyses are used, in some cases, to draw policy conclusions about the contingent fee contract.

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### I. THEORETICAL BACKGROUND

Lawyers are the primary mechanism connecting the citizenry to the legal order. Traditionally, they are pictured as neutral professionals who work only to advance the interests of their clients. This image has been called into question, however, by recent theoretical inquiries that focus on the economic incentives and personal goals lawyers bring to their work. Particular attention has been given to the effect of fee arrangement on the work that lawyers do for specific clients. Typically, the concern has focused on the implications of hourly versus contingent fee arrangements (see Franklin *et al.*, 1961; MacKinnon, 1964; Schwartz and Mitchell, 1970; Rosenthal, 1974; Clermont and Currivan, 1978; Danzon, 1981; See, 1984), though Johnson's (1980-81) recent discussion of the impact of fee arrangement extends the analysis to various forms of third-party payment.

The argument about fee effects typically uses a hypothetical benchmark to appraise the performance of lawyers under different fee arrangements. Johnson (1980-81: 570), for example, uses the concept of an "alter ego" lawyer—one who is motivated entirely by the client's best interest and will, therefore, provide the amount of effort a fully informed client would authorize the lawyer to make. In Johnson's words, the lawyer "will invest additional resources . . . in a given case [assuming complete information] until maximum net benefits are achieved for the client."

These theories suggest that hourly fee lawyers will tend to deviate from the alter ego standard by investing greater resources than is in the best interests of the client, whereas contingent fee lawyers will tend to deviate in the other direction, investing fewer resources than the client might want. The usual explanation for this postulated behavior derives from the economic incentives that lawyers who handle litigation are assumed to face. For example, an hourly fee lawyer who has surplus time is expected to spend more time on a case than the

case warrants (as measured by the alter ego benchmark) because she can charge the client for time that would otherwise produce no income. In contrast, the contingent fee lawyer with more work than time available is expected to underinvest in some cases in order to work more on other cases that promise greater financial rewards. Rosenthal's (1974) study of sixty personal injury cases in New York, the only published empirical evidence about the potential conflict of interest created by different kinds of fee arrangement, appears to support the view that contingent fee lawyers "underinvest." 1

There are some fundamental problems with this over/under investment hypothesis. The first is that the analysis assumes too simple a model of how lawyer behavior and fee arrangement may interact. Lawyers are seen as agents who are exclusively motivated by economic self-interest and whose efforts in a given case (measured by the hours they spend) are directly and solely affected by the economic incentives presented by the fee arrangement under which they work. These assumptions are questionable.

While all (or most) lawyers are sensitive to economic concerns, and some no doubt fit the image of self-interested income maximizers at the heart of the over/under investment hypothesis, such a picture is a gross oversimplification. Certainly, lawyers may and frequently do temper economic interest with other competing values, including professional standards and a sense of responsibility to the client (cf. Kritzer, 1984). Thus, hourly fee lawyers may be well aware of the costs to the client of their services and incorporate the client's financial concerns into their time-allocation plans, even if formally they are free to bill as many hours as the case demands. On the other hand, contingent fee lawyers are not necessarily going to take short cuts and omit important activities just because, on the narrowest cost-benefit calculus, they themselves may not gain as much from the marginal effort in this case as in another they are handling. Even if they were tempted to do so, the necessity to secure client consent to follow certain courses of action would limit such inclinations.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> This situation arises because there is a tendency for the return per hour of lawyer time to decrease rapidly after a certain threshold is reached. For example, a lawyer might be able to get a \$6,000 settlement after 20 hours of work; going to trial might double the recovery but might easily require another 40 hours of work. In this example, assuming a one-third contingent fee, the settlement would yield an hourly rate of \$100 while going to trial would produce an hourly rate of \$67.

 $<sup>^2</sup>$  A client's ability (or inability) to pay a substantial fee may check the amount of effort the lawyer devotes to the case. Furthermore, hourly fee

Furthermore, when economic incentives do have an impact on lawyer effort, the effect may be less direct than the literature implies; fee arrangement may affect other factors, which themselves directly influence effort. If such is the case, it is impossible to understand fully the significance—or lack thereof-of a fee arrangement unless one takes into account the mediating effect of the other factors. Thus, it has been suggested that clients' attitudes toward the amount of time lawyers spend on cases should differ with the fee arrangement they employ. Where the lawyer is hired on a contingent fee. the client, it is said, should exercise control to be sure that enough time is spent on a case (Rosenthal, 1974). Where an hourly fee is used, however, clients are advised to make certain that lawyers do not put in too much time (Wessel, 1976). Were clients actually to follow such advice, fee arrangements would play a role in determining lawyer effort, but only through their influence on the nature and degree of the control exercised by clients.

The second problem with the over/under investment hypothesis is with the idea of using the "alter ego" lawyer's effort as the benchmark against which to measure contingent fee versus hourly fee hours. The additional resources that Johnson's alter ego lawyer decides to invest are measured by the marginal "costs to the litigants"—with more resources invested as long as their expected return is greater than those costs (Johnson, 1980-81: 570). This is, in principle, a relatively straightforward proposition with respect to the hourly fee lawyer. But for the client who has retained a lawyer on a contingent fee basis it is less satisfactory because there are no marginal costs to the litigant. Johnson's conclusion that the client's gains in such a circumstance are greatest when the recovery is greatest simply reflects the fact that lawyer hours are not a cost to such a client.<sup>3</sup>

Thus, we do not believe that the concept of the alter ego lawyer is helpful in analyzing the relative amounts of effort hourly fee and contingent fee lawyers devote to cases. An alternative approach to looking at the question of the impact of

lawyers may have other clients they charge at a higher rate (or who are repeat clients), and they will not overinvest on client A's case because they would prefer to spend more time on client B's.

<sup>&</sup>lt;sup>3</sup> This analysis represents something of a simplification because the client typically must pay expenses in addition to the contingent fee, and each marginal increase in time may involve some marginal increase in expenses. However, we have shown elsewhere (Kritzer *et al.*, 1984) that in most cases expenses represent less than 10% of the overall lawyer's bill.

fee arrangement on lawyer effort is to start with the simple hypothesis that if the argument about over and under investment is correct, we would expect a contingent fee lawyer to expend less effort than an hourly fee lawyer, all other influences on effort being held constant. If such an effort gap could be found, it would lend support to concerns about too much or too little effort, though one would not be able to state definitively whether the contingent fee lawyer was underinvesting, the hourly fee lawyer was overinvesting, or some combination of the two was occurring.<sup>4</sup> Nonetheless, we would be much further along in our efforts to understand how fee arrangement affects lawyer effort. This is the analysis that we present below.

The next two sections describe the data and methodology we have used, followed by the results of our analysis of the relationship between fee arrangement and lawyer effort.

#### II. DATA

The data used in our analysis are drawn from court records and from hour-long interviews with the lawyers involved in the cases represented in the court records. Since we are interested in lawyer behavior, the lawyer rather than the case is the unit of analysis, and each case may be included more than once if interviews were conducted with more than one lawyer in that case.<sup>5</sup> The interviews were conducted about two years after the close of the case discussed. Even though the attorneys were

<sup>&</sup>lt;sup>4</sup> We should point out that the "services" provided by the contingent fee lawyer may differ in important ways from those of the hourly fee lawyer. First, the contingent fee lawyer is providing a "risk-bearing" service. That is, a part of the contingent fee can be seen as payment for assuming the risk that there will be no (or very low) recovery in the case; alternatively, one might argue that the risk is a part of the overhead that the lawyer must bear, and hence the effective hourly rate must include that element of overhead. Second, the contingent fee lawyer virtually never receives any compensation until the case is completed and thus can be said to provide a financing service; while it is not uncommon for hourly fee lawyers to defer billing until a case is concluded (we have no specific information on the frequency of this practice), it is likely that on the average, the financing aspect of the hourly fee lawyer's charge is significantly lower than for the contingent fee lawyer.

<sup>&</sup>lt;sup>5</sup> There are a relatively small number of cases where more than one respondent is included for the same side of a case. Replicating the analyses "within" each side while randomly excluding the "extra" cases produced no change in our findings (see Trubek et al., 1983b: II-103). When we contrast the two fee types, there is more of a problem since there are many cases with both a contingent fee plaintiff's lawyer and an hourly fee defendant's lawyer. However, we believe this is a nonproblem because the thrust of our findings is that the regression models for the two fee arrangements are different, and the inclusion of respondents from the same case should tend to pull the two equations together; thus we have, if anything, understated the differences in the regression coefficients.

asked to review their case files, the interview information may have been influenced to some degree by the recall process. The cases are drawn from twelve courts in five federal judicial districts: Eastern Wisconsin, Eastern Pennsylvania, Central California, New Mexico, and South Carolina. This analysis sample includes interviews with 371 hourly fee lawyers<sup>6</sup> and 267 contingent fee lawyers from cases randomly selected from the twelve state and federal courts.<sup>7</sup> Detailed information on the data collection can be found in Kritzer (1980-81), Kritzer et al. (1981), or Trubek et al. (1983b).

In order to analyze the data we had collected, we needed to deal with a number of "missing data" problems. First, we had to drop a substantial number of respondents (and thus cases) from the analysis. Naturally, we could not include cases where we lacked information on the number of hours the lawyer spent on the case (79 respondents). We also decided to drop cases where the respondents could, or did, not supply us with a money value for the amount at stake (our "stakes" variable—388 respondents). The result of our decision to drop cases with "missing" stakes data is that the regression subsample used below differs from our overall lawyer sample.

A comparison of the included and excluded cases showed that on many parameters the regression subset is not significantly different from the overall sample. However, there are some differences worth noting: the set of cases that have monetary stakes information and are thus included in the regression sample (1) are weighted more heavily toward tort and contract cases and include fewer divorce, regulation, and public law cases; (2) contain more state cases; and (3) include a higher percentage of lawyers who represent plaintiffs and work on a contingent fee basis. Our conclusions are drawn only from this subset of cases and should be interpreted accordingly.<sup>9</sup>

<sup>&</sup>lt;sup>6</sup> A small number of lawyers in our sample (about 1%) were paid on some combination of percentage and time; they were treated as hourly fee lawyers for purposes of the analysis below (see Clermont and Currivan, 1978).

<sup>&</sup>lt;sup>7</sup> Data were originally collected on 1649 cases; from these cases, we obtained hour-long, detailed interviews with 1382 lawyers (plus 430 very brief interviews covering additional cases in the sample; see Kritzer, 1980-81: 520, for more detail on why this was done).

<sup>&</sup>lt;sup>8</sup> We felt that stakes were sufficiently important in explaining hours that an analysis which omitted this variable would be of little value (and we were unable to find a way to fill in missing data on stakes). As we discuss below, we needed the stakes variable to adjust for a methodological problem inherent in data on litigation.

<sup>&</sup>lt;sup>9</sup> We did not have data on all the other variables for all the cases that remain in the regression subset. Since we could not eliminate all cases with missing data and retain an adequate sample, we estimated these missing items using means or medians. We omitted 26 respondents for whom we had

Although our analysis follows previous work in focusing on two types of fee arrangement—hourly fee and contingent fee lawyers—there are at least three "pure" types of fee arrangements for litigation-related work: the hourly fee, the contingent fee, and the flat, or fixed, fee, which is set in advance of the work.<sup>10</sup> By and large individuals, who are usually plaintiffs,<sup>11</sup> hire lawyers on a contingent fee basis (with the major exception of divorce cases); organizations usually hire lawyers on a straight hourly basis. Only a small proportion of cases—typically small, simple ones involving individuals or small organizations—involve flat fee arrangements. Reflecting their relative scarcity in practice, the incidence of flat fee cases in our sample was too small for separate analysis.

#### III. METHODOLOGY

The methodology used in our analysis first tests the assumption that if the type of fee arrangement had no effect on the amount of lawyer effort, we should find that, controlling for the other factors that influence lawyer effort, hourly fee and contingent fee lawyers spend the same amount of time on a case. The basis of that test, and of the rest of our analysis, is a general model of the time allocation process. The model on which the analysis is based includes five clusters of variables: (I) the process of interaction among the parties, (II) case characteristics, (III) participant characteristics, (IV) participant goals, and (V) processing and case management characteristics. These clusters include a total of 30 variables. The individual variables are described in capsule form in Table 1; more detail may be found in the Appendix.

missing data items we did not feel that we could "fill in." To avoid artificially depressing the variance in our data, we added a normally distributed random number to each of the means or medians that replaced missing data. Missing data were filled in this way for 1% or fewer of our cases except for the lawyer specialization variable, where 4% of the respondents had missing data.

<sup>&</sup>lt;sup>10</sup> A fourth arrangement, which few lawyers admit to using, might be described as "what the case is worth" (i.e., a subjective judgment regarding what the client is willing to pay). In addition to the "pure" types of fee arrangements, there are many combinations (e.g., hourly fee adjusted for results, which combines the hourly and the contingent arrangements). These may or may not be made explicit to the client.

 $<sup>^{11}</sup>$  An early study of litigation suggested that individuals were usually defendants (Wanner, 1974; 1975). A more recent analysis indicates that if uncontested collections cases and divorce cases are omitted and if insurance companies are treated as the real defendant in tort cases where insurance is present, individuals are almost always plaintiffs (Grossman *et al.*, 1982).

Table 1. Summary Descriptions of the Variables in the Lawyer Effort Model

					ns (and deviations)	expected
Cluster	Variable	Туре	Description	hourly	contingent	direction
PARTY II	NTERACTION (meas	ures of pretr	ial activities by the other side)			
1	Pleadings	count <sup>b</sup>	number of pleading documents filed by other side	1.47 (1.13)	1.30 (1.29)	+
2	2 Motions	count	number of motions initiated by other side	0.83 (1.19)	0.86 (1.60)	+
3	3 Discovery	count	number of discovery events (depositions, motions, etc.) initiated by other side	2.14 (3.13)	2.18 (3.21)	+
4	Briefs	count	number of briefs filed by other side	0.70 (1.30)	0.62 (1.37)	+
CASE CH	ARACTERISTICS					
5	5 Stakes <sup>c</sup>	lawyer's estimate	lawyer's estimate of what her client should have been willing to accept or to do to settle the case	\$11,449 (\$7,334)	\$14,390 (\$6,587)	+
6	6 Complexity	lawyer's estimate	lawyer's subjective estimate of the complexity of the case (five-point scale)	2.39 (1.11)	2.53 (1.19)	+
7	Duration	count	number of days from filing to termination	422.84 (283.48)	418.97 (295.46)	+
PARTICIE	PANT CHARACTER	ISTICS				
8	3 Client Type	dummy	1 for individuals; 0 for organizations (as indicated by the court record)	0.29 (0.45)	0.84 (0.37)	-
LAWYER	CHARACTERISTICS	3				
9	Specialization	factor score	indicator of degree to which the case fell within an area that the lawyer considered to be her specialty	0.08 (0.90)	0.06 (0.85)	-
10	Law School Performance	factor score	indicator of lawyer's performance based on rank in class and participation on law review	0.05 (0.69)	-0.03 (0.65)	-
11	. General Experience	count	number of years lawyer has been practicing law	11.46 (8.93)	10.03 (9.06)	-
12	Litigation Experience		proportion of time devoted to litigation	68.31 (27.39)	66.26 (23.95)	-
13	Personal Capacity	factor score	measure based on items taken from Robinson and Shaver's (1969: 102-5) scale	0.04 (0.67)	-0.04 (0.65)	-
14	Craftsmanship	lawyer's estimate	lawyer's sense of professional craftsmanship (three-point scale)	2.51 (0.69)	2.50 (0.68)	+
PARTICIE	PANT GOALS					
Client G	ioals					
15	Get Most/Pay Least	dichotomy	client sought to get the most or pay the least (coded 1); client did not have this goal (coded 0)	0.44 (0.50)	0.32 (0.47)	+
16	Get Fair/Pay Fair	dichotomy	client sought to get a fair amount or pay a fair amount (coded 1); client did not have this goal (coded 0)	0.32 (0.47)	0.49 (0.50)	-

Table 1	
(continued)	

Cluster	Variable	Туре	Description		ns (and deviations) contingent	expected direction
I armer G	oals (as measured by 1	reasons launu	er took the case)			
17		factor score	lawyer took case because it presented a challenge	-0.09 (0.85)	0.08 (0.88)	+
18	Public Service	factor score	lawyer took case because it provided an opportunity to serve the public or because of sympathy for the client	-0.15 (0.71)	0.06 (0.67)	0
19	Professional Visibility	factor score	the case would increase the lawyer's community standing or improve her position in the firm	0.03 (0.72)	0.05 (0.68)	+
20	Making Money	factor score	the case was taken because of the amount of money that could be earned	-0.08 (0.59)	0.25 (0.66)	-
2:	Service to Regular Client	dichotomy	the lawyer took the case to provide service to a regular client	0.62 (0.48)	0.16 (0.36)	0
PROCESS	SING AND CASE MA	NAGEMEN'	Г			
2:	2 Type of Court	dichotomy	federal court (1); state court (0)	0.56 (0.50)	0.45 (0.50)	0
23	B Settlement Discussions	dichotomy	did occur (1); did not occur (0)	0.90 (0.30)	0.90 (0.30)	-
2	1 Trial	dichotomy	case did go to trial (1); case did not go to trial (0)	0.12 (0.32)	0.12 (0.32)	+
2	5 Pretrial Events SOP	factor score	use of standard operating procedures for pretrial activities such as pleadings, motions, and discovery	0.01 (0.99)	-0.64 (1.01)	-
20	S Estimating Case Value SOP	factor score	use of standard operating procedures for estimating the value of the case	-0.02 (0.97)	-0.05 (1.02)	-
2'	7 Plan for Motions	dichotomy	lawyer used a plan for motions (1); no plan used (0)	0.19 (0.40)	0.13 (0.34)	
2	Plan for Settlement	dichotomy	lawyer used a plan for obtaining a settlement (1); no plan used (0)	0.70 (0.46)	0.68 (0.47)	-
29	Plan for Discovery	dichotomy	lawyer used a plan in conducting discovery (1); no plan used (0)	0.60 (0.49)	0.64 (0.48)	-
30	Client Control and Participation	factor score	client sought to exercise control over the lawyer's activity and to participate actively in decision-making regarding the case	0.20 (0.72)	-0.23 (0.71)	+ or -

<sup>&</sup>quot;A "+" indicates that a positive relationship is expected; a "-" indicates a negative relationship; and a "0" indicates that the direction of the relationship is not hypothesized in advance.

Although common sense would suggest that the amount at *stake* in the case should be the most important determinant of the amount of time spent on the case by lawyers, we do not treat stakes as the *primary* determinant of the level of lawyer effort (although we do recognize its importance and include it as one of the case characteristics).<sup>12</sup> Lawyers often fail to spend

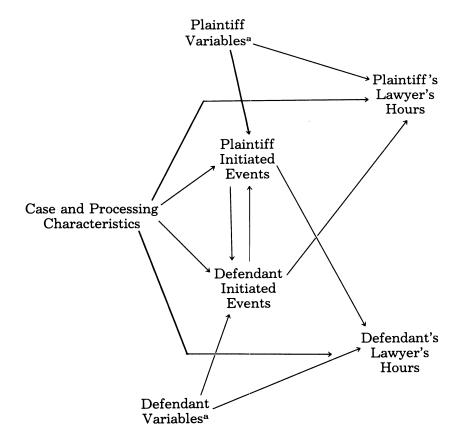
b"Count" indicates that the variable was a simple count of some type of event or some other discrete entity (e.g., days—for duration).

<sup>&</sup>lt;sup>c</sup>In the actual analysis, stakes was adjusted for nonlinearity; the particular adjustment used was to take the square root of stakes.

<sup>12</sup> At the start of our research, we did see stakes as the primary factor, with the other variables serving as modifiers of the basic relationship (Trubek, 1980-81). See Trubek *et al.* (1983b) or Kritzer *et al.* (1984) for a discussion of how this view came to be modified.

as much time on a case as the stakes may seem to warrant because the case settles before that effort has been expended. As we see it, therefore, stakes do not push the investment process along; rather they tend to place a cap on it.

Figure 1. Interaction Model of Lawyer Effort



The "party" variables include nature of participants, participant goals, and case management indicators.

It is not the stakes but the action of side A that is the primary determinant of the action of side B, and vice versa. Figure 1 suggests an image of this action-reaction model. Each lawyer's effort is a function of (1) the other side's action, (2) case and processing characteristics, and (3) "party" variables (i.e., goals, characteristics, and management efforts). A full analysis of this model would seek to account for each side's level of lawyer effort, each side's "initiatives," and each side's

goals and management decisions. The notion of interaction built into this model is intuitively pleasing because it is consistent with dispute processing in an adversary process like the American civil justice system. Because our purpose is to explain the "end variable," effort, we need focus only on the linkages in the model leading directly to the hours lawyers put in.<sup>13</sup>

We tested our theoretical model by linear regression analysis.<sup>14</sup> This statistical technique allows us to measure the

We also checked our data for multicollinearity, outliers, and heteroscedasticity and found all three. We examined all our predictor variables for possible multicollinearity (high intercorrelations) and found problems only for our original standard operating procedure indicators (which included separate indicators regarding SOPs for estimating case value, discovery, motions, and pleadings). The SOP variables used in the analysis, (25) pretrial events SOP and (26) estimating case value SOP, were factor scores created in order to alleviate this problem (we started with four SOP indicators).

To examine the impact of outliers (occasional "big cases" picked up by our random sampling procedure) on our results, we performed the regression analysis with and without the outliers in the data set. Outliers were defined as those cases requiring more than 500 hours of lawyer time, involving more than \$250,000, taking more than 1500 days from filing to termination, or having more than 20 discovery events, 10 motions, or 10 briefs. For the hourly fee lawyers the inclusion or exclusion of the outliers had minimal impact on our results, but for the contingent fee lawyers the impact of outliers was clearly noticeable. For the sake of consistency, we omitted outliers for both hourly and contingent fee lawyers.

The last problem we had to deal with was heteroscedasticity, a violation of the assumption in regression analysis that the variance of the equation "error term" (i.e., the difference between the observed and predicted values of the dependent variable) be constant for all systematically identifiable subsets of Heteroscedasticity tends to lower severely the power of observations. significance tests. Common sense suggests that one should expect a greater range of predictive error for big cases than for small cases; this is consistent with the notion that stakes serve to "cap" the level of investment of time (and money) in a case. To adjust for the heteroscedasticity in our data, we applied an adjustment factor to each observation; this yielded a set of "corrected" regression equations. The specific adjustment used was to divide all of the variables for each case by the square root of stakes. For more detail on the rationale for the procedure, see Hilton (1976: 95-100). For most analytic purposes, the "corrected" results were employed, and it is these results that we generally report below.

<sup>13</sup> The analysis of initiatives would be greatly complicated by the two-way linkage shown in Figure 1. It would also require a type of data set that is almost impossible to obtain (see Kritzer, 1980-81: 506, 520-21).

<sup>&</sup>lt;sup>14</sup> Before applying linear regression, we checked our independent variables for curvilinear relationships with the dependent variable, hours worked. The only variable for which curvilinearity appeared to be a significant problem was stakes. A curvilinear form made intuitive sense because one would expect, for example, that the difference between the time taken by two cases, one with \$2,000 at stake and the other with \$10,000 at stake, would be greater than the difference in the time taken by two cases, one with \$102,000 at stake and the other with \$110,000 at stake. A number of transformations were examined to adjust for this curvilinearity. Using the square root of the "raw" stakes measures seemed to work best; thus, all the analyses reported below use the square root of stakes rather than the original value.

independent effect of each explanatory variable holding the effect of the other variables constant. The dependent variable is lawyer's hours. The independent variables are the variables in the clusters specified in our model. It is important to note that the number of lawyer hours we report in our analysis below represents estimates based on our statistical model. Since we could not obtain samples with identical cases (except for fee arrangement), we have "created" such cases statistically using linear regression.

It became clear almost from the start of our analysis that hourly fee lawyers behaved rather differently from contingent fee lawyers—so differently, as reflected in the coefficients of many of our dependent variables, that it is statistically inappropriate to include fee arrangement as just another variable in our regression equations.<sup>15</sup> We thus estimated two separate equations—one for hourly fee lawyers and the other for contingent fee lawyers. The amount of variance explained by the models was very similar for the two sets of lawyers. As shown in Table 2, R2 is .494 for hourly lawyers and .525 for contingent fee lawyers. 16 Also, three clusters of variables have important influences on hours for each group; two of these are the same for both types of lawyers (party interaction and participant goals). However, the third important variable type differs for the two (processing decisions for hourly fee lawyers and case characteristics for contingent fee lawyers).

<sup>15</sup> If it were not for the fact that the coefficient sets for hourly and contingent fee lawyers differed significantly, we could have tested the hypothesis that one group of lawyers spent significantly more time than the other by simply adding a dummy variable for fee arrangement to the equation. In the course of the analysis, we did this just to see what would happen; the t-statistics for the corrected and uncorrected forms (606 degrees of freedom) were 0.35 and 0.41, respectively, neither of which indicates statistical significance.

Given that the coefficients are in fact different for the two subgroups of lawyers, the effort gap will vary depending upon the specific values the other predictor variables take on. Consequently, one cannot speak of a single value for the effort gap, but must talk about the effort gap for a given situation. If there were only one predictor variable, say stakes, then one could talk about ranges of stakes where the gap does exist and about ranges where there is no gap. See Rogosa (1980) or Friedrich (1982) for more detail on the issues involved. Suffice it to say that there is no way to vary systematically the 30 variables we use; consequently, we will focus on a more limited set of situations.

<sup>16</sup> Since our goal in assessing the overall fit is to look at the "best" fit we can get, we have used the R² from the uncorrected (ordinary least squares) regression estimates. Because of the mathematics of the correction for heteroscedasticity, the uncorrected estimate of the equation will always yield a better fit for the equation than will the "corrected" (weighted least squares) regression estimates (see Hilton, 1976: 100). On the other hand, the corrected estimates yield the best information regarding the significance of the contribution of individual variables or groups of variables.

relative importance of the influence of the different explanatory variables is also often substantially different. These differences can be seen in Table 3, though we will defer discussion of the specific differences until later.

Table 2. Summary of Regression Results for Hourly and Contingent Fee Lawyers

Main Group Subgroup	df		Н	ourly <sup>a</sup>		Contin	ngent <sup>b</sup>		
		F	р	R <sup>2</sup> change	R <sup>2</sup> change per df	F	p	R <sup>2</sup> change	R <sup>2</sup> change per df
I. PARTY INTERACTION (A)	4	11.01	.0001	.05806	.015	4.43	.0018	.05530	.014
II. CASE CHARACTERISTICS (B)	3	7.37	.0001	.02679	.009	13.97	.0001	.11602	.039
III. NATURE OF PARTICIPANTS	7	2.48	.0170	.02289	.005	1.05	.3983	.02290	.003
C. Client Type	1	0.26	.6123	.00034	.000	4.70	.0312	.01467	.015
D. Lawyer Characteristics	6	2.65	.0158	.02098	.003	0.40	.8762	.00756	.001
IV. PARTICIPANT GOALS	7	11.04	.0001	.10194	.015	2.67	.0111	.05843	.008
E. Client Goals	2	15.41	.0001	.04063	.020	3.84	.0229	.02395	.012
F. Lawyer Goals	5	9.28	.0001	.06117	.012	2.15	.0606	.03352	.007
V. PROCESSING AND MANAGEMENT	9	6.52	.0001	.07748	.009	0.74	.6740	.02072	.002
G. Processing Decisions	3	6.36	.0003	.02517	.008	1.09	.3561	.01016	.003
H. Case Management	6	7.85	.0001	.06216	.010	0.71	.6457	.01321	.002
R <sup>2</sup>			.49362				.52535		

 $a_{N} = 371$ 

These differences mean that the cases in our samples for the two types of fee arrangements are not generally equivalent, making a comparison between the two groups, other things being equal, more difficult. We make our initial hourly fee/contingent fee comparison, therefore, using three separate estimates: we estimate (a) the time expended by both groups on the "average" contingent fee lawyer case (i.e., the difference between the hours spent by the two groups when each of the explanatory variables is set at its mean value for contingent fee lawyers); (b) the time spent by both groups on the average hourly fee lawyer case (estimated the same way); and (c) the time spent by both groups on the "average" case for the two groups of lawyers combined.

Before presenting the results of these procedures, we must discuss a final methodological complication. As we said earlier, contingent fee lawyers usually represent plaintiffs. Hourly fee lawyers are somewhat more evenly divided: in our sample 71 percent of the hourly fee lawyers represent defendants. This difference raises the question of whether our efforts to measure the effects of fee arrangement might reflect, at least in part, differences between how plaintiffs' and defendants' counsel approach cases. Since contingent fee defendants' counsel are

 $b_{N=267}$ 

rare or nonexistent, we cannot carry out the analysis with strict controls for side. We can, however, compare three groups—contingent fee lawyers, hourly fee plaintiffs' lawyers, and hourly fee defendants' lawyers—to try to sort out this question. If hourly fee plaintiffs' lawyers more closely resemble hourly fee defendants' lawyers than contingent fee lawyers, we can tentatively attribute the difference more to fee arrangement than to side.<sup>17</sup>

Table 3 presents, in addition to regression results for both sets of lawyers, the equivalent results for hourly fee lawyers broken down by side. Unfortunately, the implications of the breakdown are not clear. In part this reflects the small sample size for hourly fee plaintiffs and collinearity problems (i.e., correlations among the independent variables) that appear to exist within these two subgroups. The results for hourly plaintiffs' lawyers appear to fall somewhere between those of hourly defendants' lawyers and contingent fee lawyers. For some variables, hourly plaintiffs' lawyers are closer to hourly defendants' lawyers while on others they are closer to contingent fee lawyers. Consequently, although our observed effects may reflect some influence of side, we can say with a high degree of confidence that there is a fee arrangement effect in addition to any effects of side. The subjects of side.

<sup>&</sup>lt;sup>17</sup> One might at first glance be concerned that the results we have presented represent the peculiarities of personal injury litigation since common wisdom is that contingent fees and personal injury cases "go together." This is in fact true, but in a different way than is commonly believed. The table below shows tabulations for the number of respondents by area of law, fee arrangement, and side (for hourly fee lawyers).

	Torts only	Contract only	Both Tort and Contract	Neither Tort nor Contract
Contingent Fee	210	64	20	42
Hourly Fee Plaintiff	14	90	4	35
Hourly Fee Defendant	142	95	15	54

As the table shows, while most tort plaintiffs hire lawyers on a contingent fee basis, many cases not involving torts are handled by contingent fee lawyers as well (see also MacKinnon, 1964: 25-28). Thus, the results reported above for contingent fee lawyers do not simply reflect the peculiarities of personal injury litigation.

The problem of multicollinearity accounts for some of the apparently bizarre results in Table 3 (e.g., the large negative coefficient of the trial variable for hourly plaintiffs' lawyers).

<sup>19</sup> This conclusion is reinforced by a global hypothesis test, also known as a Chow test (see note 26 below). The test showed that hourly fee plaintiffs' lawyers differed in a statistically significant way from both of the other two groups. The significance tests were done with both corrected and uncorrected data:

Table 3. Detailed Regression Results for Hourly and Contingent Fee Lawyers

				Conting	ent	All Hou	rly	Hourly Pla	aintiff	Hourly Def	endan
				b	std. error	b	std. error	b	std. error	b	std. error
I.	PAR	ry II	NTERACTION								
	A.		ty Interaction Pleadings Motions Discovery Briefs	-2.004 .145 2.865*** 4.119*	1.684 1.744 0.881 2.262	-2.675 -1.085 2.731*** 8.851***		-4.274 5.650 4.527** 4.205	2.782 4.151 1.787 4.589	412 4.225***	3.022 2.027 1.046 2.201
II.	CASE	ЕСН	ARACTERISTICS								
		5. 6. 7.	Complexity Duration	.310*** 5.963*** .012*		.232*** 3.780** .013*	0.051 1.465 0.006	.234** 20.729*** 002	.086 4.222 .018	.203** 1.777 .001	.062 1.612 .007
II.			OF PARTICIPANTS								
	C.		ent Type Individual/ Organization	-9.440*	4.354	-1.949	3.843	-15.742*	8.134	-5.506	4.531
	D.	9. 10.	Law School Performance	2.455 2.710	2.143 2.793	1.872 3.442	1.794 2.118	-8.048 -1.336	4.738 4.291	3.420 6.076**	2.014 2.578
		11. 12. 13. 14.	•	038 036 1.144 052	0.182 0.069 2.354 2.170	009 .037 -1.226 7.026**	0.179 0.062 2.388 2.357	135 .034 -10.770 6.637	0.458 0.128 7.238 6.761	070 .068 1.950 9.447***	0.205 0.073 2.694 2.702
V.	PAR	ricii	PANT GOALS								
	E.		ent Goals Get Most/Pay Least Get Fair/Pay Fair	-9.931* 0.983	4.359 3.581	- 18.352*** 20.498***		-22.539* -13.909*	13.644 7.855		4.223 5.665
	F.		Professional Visibility Make Money	2.540 2.944 0.620 3.165 -13.238**	2.089 2.483 2.578 2.480 5.119	.909 11.017*** 6.165*** 1.165 3.214		0.176 -3.252 -5.483 10.020 -14.267	5.983 4.993 6.087 6.916 9.423	-13.550** 8.180** 0.741	2.124 2.805 2.363 3.022 4.088
V.	PRO	CESS	SING AND MANAGEM	IENT							
	G.	Pro 22. 23. 24.	cessing Decisions State/Federal Trial Settlement Discussions	0.341 055 10.842	4.161 6.705 6.094	14.116*** 4.637 3.022	3.373 5.714 5.739	0.583 52.295** 15.318	8.785 21.483 17.935	2.372	4.005 5.971 6.895
	H.	Cas 25. 26.	e Management	0.966 0.972	1.708 1.562	2.676* 1.397	1.505 1.590	-2.644 -4.251	3.844 3.746	1.763 .045	1.773 1.870
		27. 28. 29. 30.	Plan for Motions Plan for Settlement Plan for Discovery Client Control and Participation	-11.389 $-3.467$ $-1.179$ $1.750$	6.725 3.755 3.466 2.404	11.109** -7.281* 15.921*** -4.691*	4.029 3.671 3.325 2.192	6.603 -3.711 5.066 2.936	11.443 8.942 16.545 4.916	9.127** 21.423*** -9.131* -6.804**	4.429 3.910 3.993 2.519
			CONSTANT	-3.33	5	-21.47	'3	- 36.99	93	-19.09	98
	*p<.0	)5	**p<.01	**p<.001							

		corr	ected	uncorrected	
	df	F	р	F	р
Contingent versus (hourly plaintiff)	31/313	1.509	.0441	2.039	.0013
Hourly defendant versus (hourly plaintiff)	31/309	2.274	.0002	2.005	.0011

#### IV. RESULTS

Our estimates<sup>20</sup> of the number of hours an hourly fee lawyer and a contingent fee lawyer will spend on the three prototypical cases—the average hourly fee case, the average contingent fee case, and the overall average case—are shown in Table 4. As can be seen, the differences are not substantial. Nor is the direction of effect consistent. For the average contingent fee case, the contingent fee lawyer is expected to spend slightly more time than the hourly fee lawyer (51 versus 48 hours). For the average hourly fee case, the hourly fee lawyer is expected to spend substantially more time (51 versus 42 hours) than the contingent fee lawyer. The overall average is a reflection of the other two combined—the hourly lawyer spends somewhat more time, but not as much more as for the hourly fee average case (50 versus 46 hours).

	Hourly Fee Lawyer	Contingent Fee Lawyer
"Average" Hourly Fee Case	50.6	42.1
"Average" Contingent	47.9	50.7

Table 4. Predicted Number of Hours for the "Typical" Case

When we disaggregate the impact of fee arrangement by size of stakes (holding all other variables at their mean value for both types of fee arrangement taken together), the interesting pattern shown in Figure 2 appears.<sup>21</sup> The solid line represents our estimate of the average time investment of hourly fee lawyers, controlling for the other variables in our model, and the broken line represents the estimate for

49.5

45.7

Fee Case Overall "Average"

Case

<sup>&</sup>lt;sup>20</sup> In making our estimates, we have retained our original model rather than discarding the nonsignificant variables in Table 3. We have chosen to do this for theoretical reasons; namely, we believe that our basic model is correct on theoretical grounds, and we prefer not to risk the problems created by misspecification arising from the omission of variables, particularly since there is less danger from misspecification by inclusion than from misspecification by exclusion (see Deegan, 1974; 1976).

<sup>&</sup>lt;sup>21</sup> We have selected stakes as the case characteristic to vary because it seemed to us that in most discussions of litigation, the first question that is typically asked is, "what's at stake?" Moreover, most discussions relating to "access to justice" raise the question of "modest" cases (typically under \$10,000), and the problem of providing legal services and other dispute processing services in such cases (see, for example, Johnson *et al.*, 1978).

contingent fee lawyers.<sup>22</sup> What Figure 2 suggests is that contingent fee lawyers put in less effort for small cases than do hourly fee lawyers, but they put in *more* time for "big" cases. Such behavior would be economically rational. The contingent fee lawyer's potential return is closely related to the potential recovery (i.e., stakes), and if a greater effort with a "big" case will substantially increase the recovery, lawyers would be behaving rationally in expending more effort.

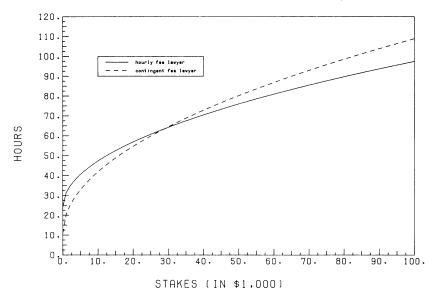


Figure 2. Expected Lawyer Time by Stakes

Before we can draw any conclusions with confidence, we must see whether the differences shown in the figure are statistically significant.<sup>23</sup> To do this we relied upon the

The reason that the lines curve even though the regression equation is linear is that the predictive equation uses the square root of stakes, whereas Figure 2 uses the untransformed version of stakes.

There is another problem with this interpretation as well. While it is rational for the contingent fee lawyer to spend more time on a big case than she would spend on a small case, it is not altogether clear why she would spend more time than the hourly fee lawyer. It may be that the contingent fee lawyer spends more time on big cases because she does not have to justify her time expenditure to the client and can behave in a risk-neutral fashion while the hourly fee lawyer has clients who are more likely to be risk-averse and thus unwilling to risk having to pay for all the time that the lawyer might reasonably spend on the case. The problem with this explanation is that the hourly fee lawyer is very likely to be representing an organization, which, as a "repeat player" (see Galanter, 1974) in the litigation game, should behave in a risk-neutral fashion. Also, one could argue that it is the contingent fee lawyer who should be risk-averse, since the lawyer stands to receive no compensation if she loses the case (though if she has no other cases to work on, the value of the lost time is minimal).

268

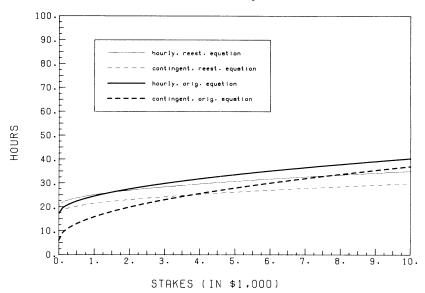
sampling errors of the estimated means for lawyer hours for \$1,000 increments in stakes (from zero to \$100,000). These sampling errors are a function of the deviation of the particular stakes value from the mean of stakes; the sampling errors are smallest near the mean and increase rapidly as the distance from the mean increases. Let us denote the estimated mean of lawyer hours for fee lawyers as  $\hat{\mu}_H$  and its sampling errors as  $\hat{\sigma}_H$ ; the corresponding estimates for contingent fee lawyers are  $\hat{\mu}_C$  and  $\hat{\sigma}_C$ . The test statistic for a given value of stakes is a t-statistic:

$$t = \frac{\hat{\mu}_H {-} \hat{\mu}_C}{\sqrt{\hat{\sigma}_H{}^2 + \hat{\sigma}_C{}^2}}$$

A separate test statistic is computed for each value of stakes.

Using the test, we obtain significant differences only for stakes of \$6,000 or less. At the last point of statistical significance, \$6,000, the gap in lawyer effort is about 7 hours—32 hours for hourly fee lawyers versus 25 hours for contingent fee lawyers. To look more closely at the stakes range for which fee arrangement does have a significant effect on overall hours, we recomputed the value for the two curves using the mean values for cases \$10,000 and under. The revised curves, shown as the heavy lines (solid for hourly, broken for percentage) in Figure 3, are essentially the same as for the equivalent portion

Figure 3. Expected Lawyer Time by Stakes for Small Cases



of Figure 2, since the shape of the curve is determined by the coefficient for stakes. We then reestimated the regression equations using \$10,000 and under cases only, and once again recomputed the curves (shown as the lighter pair of lines in Figure 3). This pair of lines differs from the other pair in two regards. First, they are virtually parallel to one another (i.e., the gap between the lines changes little as stakes move from zero to \$10,000). This is because there is little difference in the stakes coefficients in the \$10,000 and under regressions. Second, they rise at a much slower pace. Elsewhere we have reported that we found little or no relationship between effort and stakes when the analysis is limited to cases involving \$10,000 or less (Kritzer et al., 1984), and this is what is showing up here. Nonetheless, for both pairs of curves, the line for contingent fee lawyers falls below that for hourly fee lawyers, which is consistent with our finding that there is an "effort gap" for cases in the lower stakes range.

Although we have found a statistically significant difference in effort only for cases with relatively modest amounts, this finding is not unimportant. First, as we have reported elsewhere (Trubek et al., 1983a), the median case in state courts (based on cases terminated in 1978), where well over 95 percent of civil cases are filed (cf. Flango et al., 1983: 5), involves about \$4,500 (even after eliminating "small claim" type cases involving less than \$1,000). Thus, our analysis indicates that for something over 50 percent of the civil suits for money damages filed in the United States, lawyers working on a contingent fee basis would put in significantly less time than would lawyers working on an hourly fee basis.<sup>24</sup> Second, as we noted in our discussion of the significance test we employed, the power of the test is greatest in the range in the vicinity of the mean, and thus the lack of significant differences for larger cases may be an artifact of the reduced power of the test.

The absolute size of the gap is not great—7 hours. In relative terms, however, it is sizable—nearly 22 percent of what hourly lawyers spend on a typical \$6,000 case. Should we be concerned about this difference? The answer depends on whether the time differential makes a difference in case

<sup>&</sup>lt;sup>24</sup> Some lawyer activity produces costs other than fees; for instance, medical examinations unconnected to treatment or the stenographic and travel costs of depositions. If such costs were generally relevant in small cases, which we doubt, plaintiffs might secure larger net recoveries with lawyers who did less for them if the difference in effort avoided such costs.

outcome.25

Whether or not the "effort gap" is important in terms of outcome, it is clear that fee arrangement has an important impact on lawyer behavior. The kinds of variables influencing lawyers differ depending on the fee arrangement, even though the overall ability of our model of lawyer effort to account for that effort was about the same for hourly fee and contingent fee lawyers.<sup>26</sup> These differences were summarized in Table 2 (which shows the relative influence of the variable clusters). Let us now turn to a more detailed examination of the results shown in Table 3 (looking at the coefficients for contingent fee lawyers and the overall coefficients for hourly fee lawyers).

Both groups of lawyers are influenced by party interaction variables and by participant goals. However, there are major differences within the clusters (i.e., which individual variables are important and how important they are). For example, the variable in the party interaction cluster that has the biggest impact for hourly fee lawyers, the number of briefs filed by the other side, also has the largest impact for contingent fee lawyers, but the impact is only half as large in the latter case. In the case characteristics group, all the variables are significant for both groups, but the impact of both stakes and complexity is larger for contingent fee lawyers. Few of the nature of participants variables have an influence for either group of lawyers, but the ones that do are different. Client type is significant for contingent fee lawyers while craftsmanship is significant for hourly fee lawyers. Participant goals are much more important for hourly fee lawyers, both in terms of the number of statistically significant coefficients and in terms of the magnitude of the effects of the individual variables. For example, both the indicators of client goals are significant for hourly fee lawyers, whereas only one is significant for contingent fee lawyers (and that one is about half the size of the corresponding coefficient for hourly fee

<sup>&</sup>lt;sup>25</sup> We have conducted some analyses of case outcomes (see Kritzer *et al.*, 1985) and have been unable to detect any relationship between outcomes and effort for contingent fee lawyers. This analysis has not explored, to date, the influence of relative effort (i.e., the impact of the opposing party's lawyer's effort).

 $<sup>^{26}</sup>$  Even though the differences are quite clear, it is worthwhile to test formally the hypothesis that the set of coefficients for hourly fee lawyers differs from the set for contingent fee lawyers. This was done using the method described by Specht and Warren (1976), which is also known as the Chow test. The test was done for both the corrected and uncorrected form of the equation. Both tests produced highly significant F statistics (30 and 576 degrees of freedom), 2.118 for the corrected form (p < .001) and 1.878 for the uncorrected form (p < .01).

lawyers). None of the processing and management variables are significant for contingent fee lawyers whereas most are significant for hourly fee lawyers; furthermore, the values of the coefficients differ sharply for the two groups.<sup>27</sup> The one variable that was expected to have different effects for the two groups of lawyers, client control, has the expected effect for hourly fee lawyers, but has no significant influence (though the sign is in the predicted direction) for contingent fee lawyers.<sup>28</sup>

The time allocation of hourly fee and contingent fee lawyers is dependent on different factors. Contingent fee lawyers appear to be highly sensitive to the potential productivity of their time and are less affected by craft-oriented factors. This effect can be seen in two variables: craftsmanship and response to opposing party's briefs. The contingent fee lawyer does spend time in response to the opposing side's briefs, but that response involves half as much time per brief as the response of hourly fee lawyers.<sup>29</sup> While the hourly fee lawyer is strongly influenced by commitment to craftsmanship, the contingent fee lawyer is not. On the other hand, the level of effort of contingent fee lawyers goes up at a faster rate as the level of stakes increases than that of hourly fee lawyers. In other words, the contingent fee lawyer appears sensitive to the potential return to be achieved from a case, which is closely related to the stakes. The hourly fee lawyer's return from a case is not as tied to stakes, and other types of considerations (e.g., the client's goals, the nature of the forum, etc.) have a greater influence.

Before turning to our conclusions, we should briefly explore the *side* versus *fee arrangement* question as reflected in the results shown in Table 3. As we noted previously, the effect of some variables is dissimilar for hourly fee defendants' and plaintiffs' lawyers while for other variables it is the contingent and hourly plaintiffs' lawyers who have dissimilar

 $<sup>^{27}</sup>$  We should note that the difference in significance cannot be attributed to the smaller sample size for contingent fee lawyers. With one exception, even if the contingent fee lawyer sample were as large as the hourly fee sample (and everything else were unchanged), the coefficients would not differ significantly from zero; the one exception is *plan for motions*, and there the sign of the coefficient is different.

<sup>&</sup>lt;sup>28</sup> One variable that we have not considered in this analysis is area of law; one might expect that defense lawyers in personal injury cases would differ from other hourly fee lawyers. Where we included area of law as a variable, we found that it exerted no significant influence over and above the effects represented by the other variables in the model (Kritzer *et al.*, 1984).

<sup>&</sup>lt;sup>29</sup> We should note, however, that this might be a "side" effect; as shown in Table 3, the contingent fee coefficient is virtually identical in magnitude to that for the hourly plaintiff, though the latter is not statistically significant.

coefficients. To be more specific, we find substantial differences based on side for court (state versus federal), plan for settlement, client control and participation, and briefs; we find substantial differences based on fee arrangement for discovery events, stakes, and client goals (get most/pay least and get fair/pay fair). For this latter set, the differences are consistent with what the arguments about fee arrangements would lead one to expect: contingent fee lawyers are more sensitive to stakes (which determine their expected return), put in less time on discovery (i.e., try to reduce their time), and are less concerned with their clients' goals. At the same time, the side-based dissimilarities tend to muddy the picture: e.g., where we had strong theoretical reasons to expect contingent fee lawyers and hourly fee lawyers to be influenced differently by client control and participation, the differences we find seem to be side-related; although we found that contingent fee lawyers put in less time than hourly fee lawyers responding to discovery, when it comes to briefs, the differences that we seem to find are between defendants' lawyers and plaintiffs' lawyers (irrespective of fee arrangement). Despite this "haziness," Table 3 shows some clear differences between hourly and contingent fee lawyers, and those differences make theoretical sense.

#### V. CONCLUSIONS

Simple hypotheses about the relationship between fee arrangements and the way lawyers handle civil cases are misleading, at best. Where such models predict that, other things being equal, contingent fee lawyers would always spend less time on a case than hourly fee lawyers, our data show that this effect occurs only in cases involving less than \$10,000; above that level (if anything) the opposite effect appears to be occurring. Moreover, where simple models suggest that fee arrangements affect lawyer behavior directly, we have found that the effects, when they exist, are more indirect and work through other variables, which themselves must be taken into account before one can understand what difference fee arrangements will make in any particular case.

Second, our analysis suggests that even if contingent fee lawyers and hourly fee lawyers spend similar amounts of time on cases, the factors that affect time allocation differ. Thus, contingent fee lawyers seem to be more sensitive to the productivity of their time and are less influenced by purely craft-oriented considerations. As the amount of money at stake in a case goes up, the contingent fee lawyer seems to be willing to invest relatively more time in cases.

More than anything else, our study points to the need for additional conceptual and empirical work on fee arrangements before anything definitive can be said about the policy issues that are typically addressed in the literature. We have pointed out that the assumptions underlying some of the criticisms of the contingent fee are questionable. Even if contingent fee lawyers do spend less time on cases than would hourly fee lawyers, the client is still benefited by a low cost, low risk opportunity to pursue a claim which would otherwise be unavailable. When one finds, as we did, that the alleged effort gap may not always exist, there is further reason to question the policy conclusions that have been drawn so far.<sup>30</sup>

This rationale does not lead to an unqualified defense of the contingent fee against the criticisms that have been leveled at it. We do find an effort gap for many of the cases brought in civil courts. But we do not know whether this gap affects case outcomes, nor do we know whether any lesser outcomes can be justified by offsetting advantages of the contingent fee to the client. Thus, while the study clarifies some empirical and policy issues in the debate over fee arrangements, it certainly does not settle them.

### APPENDIX: VARIABLE MEASUREMENT

The specific indicators for each of the variables that our model suggests would be important in accounting for lawyer effort and their construction have previously been reported in detail (see Kritzer *et al.*, 1984). Here we simply summarize the indicators used for each of the clusters.

The variable to be explained is the number of hours that the lawyer(s) reported having worked on the case; if more than one lawyer within a firm had worked on a case, we combined the time for all of the lawyers to arrive at a single figure.

The independent variables were grouped into five separate clusters. The first cluster of explanatory variables was designed to measure party interaction. As indicators of interaction, we used counts of each of four types of court events that were initiated by the other side; these indicators were chosen because a principal vehicle of the action-reaction process is the formal initiation of activities such as discovery and motions (both procedural and substantive). Our

<sup>&</sup>lt;sup>30</sup> Another policy question concerns the propriety of the fees earned by contingent fee lawyers in "big" cases (see Grady, 1976). Our analysis does not speak directly to that question.

assumption was that each event required a response that would result in the expenditure of lawyer time. Four separate measures were created by counting four distinct types of events: pleadings (1),<sup>31</sup> nondiscovery motions (2), discovery events including depositions, interrogatories, discovery motions, and the like (3), and briefs (4).

The second cluster of explanatory variables measures case characteristics. These include measures of the amount of money at stake, the complexity of the case, and the length of time from the date of filing to the date of termination (through judgment or dismissal by whatever means and/or for whatever reason). We have already noted the reasons why we expected stakes (5) to be an important determinant of the time invested. The implications of complexity (6) also appear intuitively obvious: cases vary in the ease with which questions of law may be answered and proof made. The more complex the law involved, or the more difficult the problems of proof, the more time it should take to conduct the litigation. Our measure of complexity was based on lawyer responses to a question in which they were asked to rate the complexity of the case on a five-point scale. Finally, we expected that the length of time a case took from the filing of the complaint to the termination of the suit would have an independent effect on the number of hours lawyers put in. Cases that stretch over long periods of time may require a lawyer periodically to refresh her memory and may also lead her to "find" things to do. We measured duration (7) as the number of days that elapsed from the filing of the case to its termination.

Our third cluster of independent variables deals with the *nature* of the participants (i.e., the lawyers and their clients). We classified clients—client type (8)—as individuals or organizations because the literature suggests (Galanter, 1974) that organizations will devote more resources to litigation than individuals. This may, at least in part, reflect the ability of organizations to subsidize legal fees by deducting them as a business expense from taxable income, which is not ordinarily possible for individual litigants.

With respect to lawyers, our information was more extensive. We created six separate indicators designed to measure variation in lawyer characteristics. Specialization (9) measures whether the case in our sample fell within the lawyer's specialty or not. Law school performance (10) is the lawyer's self-report performance as a law student (i.e., rank in class and participation on the law review). Amount of general experience (11) is the number of years the lawyer had been practicing law. Litigation experience (12) is the proportion of the lawyer's time devoted to litigation. Personal capacity (13) is a measure of the lawyer's feelings of efficacy based on a standard measure. Lastly, *craftsmanship* (14) is the likelihood (self-reported) of spending extra time to make marginal improvements on legal documents; the more likely this was, the higher the "craftsmanship" score. We expected the first five lawyer characteristic variables, which measure ability and self-confidence, to be inversely related to the amount of time lawyers spent on cases. More experienced,

<sup>&</sup>lt;sup>31</sup> The numbers and letters in parentheses are variable numbers and subset flags that we use to index the tables.

specialized, and confident lawyers should not have to spend as much time on cases as attorneys who were newer to the field of law, the courtroom, or to practice in general. The craftsmanship variable was expected to work the other way. One would expect lawyers who are more oriented toward "craftsmanship" to spend more time on their cases, other things equal.

Our fourth cluster of independent variables relates to the participants' goals; these we measured for both lawyers and clients using data from the lawyers. We asked lawyers what they thought their clients' goals were in the case. The "goals" variable, in a sense, modifies the "stakes" variable. We expected the lawyer whose clients wanted to get the most (or pay the least) to put in more time on a case than the lawyer in an otherwise identical case whose client only wanted "fairness." We assumed that those clients (about 24% of our respondents' clients) who mentioned neither "get most/pay least" (15) nor "get fair/pay fair" (16) but did mention something else (in response to the open-ended question that we had asked) were primarily concerned with goals other than money.

Since lawyers may have their own motives, which might affect the amount of time they spend on cases, we also asked our respondents why they had taken the case in question. From their answers, we constructed five *lawyer goal* variables designed to measure the predominance of different factors in the lawyer's decision to take the case. These are:

challenge (17)—did the case present a challenge; was it intellectually interesting?

public service (18)—did it provide an opportunity for service to the public; was it taken because of sympathy for the client?

professional visibility (19)—would the case increase the attorney's community standing, improve her position in the firm, create publicity for the firm?

making money (20)—was the case taken primarily for the amount of money the lawyer would earn?

service to regular client (21)—did the lawyer take the case simply to service a regular client?

We felt that variations in these goals were likely to affect hours worked, but we did not have strong expectations concerning the nature of some of the other goals. For example, we thought that the professional visibility and challenge goals might lead to more hours than the making money goal, but we had no *a priori* expectations about the direction of the "public service" variable's effect.

The final cluster of variables we constructed related to the processing and management of the case. During a case a number of key processing decisions are made which might affect lawyer effort. The decision whether to file in state or federal (22) court, assuming a choice exists, can have an effect because different courts may have different rules and norms that affect the amount of effort required to process a case. Decisions to engage in settlement discussions (23) and to take a case to trial (24)<sup>32</sup> may also have an impact on lawyer effort.

<sup>32</sup> The trial variable is taken from the court record and indicates whether a trial was started, even if the case settled during trial.

We expected lawyers to vary in the case management techniques they used and that these differences might affect the hours they put in. We used three indicators: standard operating procedures (SOPs), plans, and client control. We thought that the lawyers who developed standard operating procedures (e.g., the use of preprinted forms, computer programs, and the like) for estimating case value (26) and for pretrial events (25) would be able to reduce the number of hours spent on a case, other things being equal. Explicit planning should also increase lawyer efficiency and thus decrease time spent: plans for motions (27), plans for settlement (28), and plans for discovery (29) indicate whether or not the lawyer reported planning in advance for the activities in question.

We thought client control and participation (30) would influence hours spent, but that the effect would differ for hourly fee lawyers and contingent fee lawyers. Following Johnson (1980-81), we thought that hourly fee clients would most often want to reduce the hours spent by their lawyers and contingent fee clients would try to increase the time spent by their lawyers. For these reasons we expected that a high level of client control for hourly fee lawyers would reduce the number of hours those lawyers worked on a case, other things equal. In contrast, we expected that for contingent fee lawyers high client control would lead to an increase in the number of hours the lawyer would work on the case (see Rosenthal, 1974). We measured the client control variable using the lawyers' descriptions of (a) reporting procedures to the client and (b) the client's participation in the key decisions in the case.

Our complete model includes the dependent variable "hours" and the 30 independent variables that we thought might explain variation in hours expended. In developing our model, we had to rely on "empirical feel" as well as on existing theory since the available theory was incomplete and largely untested. Table 1 sets forth all the variables described above, including measurement method, summary statistics, and the expected direction of the relationship (0 designates variables for which we had no expectation of the direction of the possible effects).

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