TIME AND MONEY: DISCOVERY LEADS TO HOURLY BILLING

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It is ironic that many clients and lawyers now condemn hourly billing. Starting in the 1950s, both groups demanded the switch from fixed-fee billing to hourly billing. This article explains why. Using a new economic model, Professors Cloud and Shepherd show that societal changes, particularly the expansion of pretrial discovery in the 1938 Federal Rules of Civil Procedure, led inevitably to hourly billing. Hourly billing both efficiently shifted new risks away from lawyers and made legal services cheaper than under fixed-fee billing.

The economic model indicates that clients and lawyers balance two concerns when choosing a type of contract. First, they seek to reduce moral hazard, the incentive for an attorney to devote too much or too little time to a case. Second, they attempt to shift the risk of uncertain litigation costs to whomever of the client or lawyer is less risk averse. If litigation costs are relatively certain, then the efficient contract is a fixed-fee contract. Although such a contract imposes a cost risk on attorneys, the contract reduces moral hazard by reducing the lawyer's incentive to overbill. However, if cost uncertainty increases greatly, as it did after the 1938 changes in the Federal Rules, and lawyers are more risk averse than their clients, then it becomes efficient to switch to hourly billing. Although hourly billing increases moral hazard, it reduces risk for the attorney. If cost uncertainty is large enough, then the savings from risk reapportionment, which the lawyer and the client can share, will more than offset the cost of the waste from moral hazard. The switch to hourly billing reduces clients' legal fees.

History confirms the model's predictions. Before 1938, the standard fee arrangement was a fixed fee. Broadened discovery

then increased the uncertainty of litigation costs, especially as states copied the Federal Rules over the next two decades. Starting in the mid-1950s, as the model predicts, litigators, spurred by their institutional clients, switched to hourly billing. By the late 1960s, society's growing complexity had increased cost uncertainty for transactional lawyers. Thus, as the model predicts, the bar soon also shifted to hourly billing for transactional work. Many personal injury cases continue to be litigated under contingency agreements, a form of fixed fee, in part because, as the model shows, clients in these cases are often more risk averse than other clients.

The model suggests why clients and lawyers have now begun experimenting with forms of fixed-fee billing. Cloud and Shepherd suggest that because the conditions that once made hourly billing efficient may now have changed, economic pressures are building for a return to forms of fixed-fee billing.

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I. INTRODUCTION

"Remember that Time is Money."[1]

For both lawyers and clients, hourly billing has created "a real crisis in the profession."[2] Lawyers complain both about the deadening drudgery of recording their professional lives in six-minute increments and about the relentless pressures to bill ever more hours. Clients complain that hourly billing makes legal services too expensive. And hourly billing breeds mistrust of lawyers because it creates incentives for lawyers to bill too many hours on client matters.

These reciprocal complaints might seem mystifying. If both lawyers and clients despise hourly billing, then why did they choose to adopt it in the 1960s and 1970s as the primary method for calculating fees? And why do they continue to use it? This article helps to solve the mystery.

　　　1.　BENJAMIN FRANKLIN, ADVICE TO A YOUNG TRADESMAN (1748), *reprinted in* BENJAMIN FRANKLIN: THE AUTOBIOGRAPHY AND OTHER WRITINGS 185, 186 (L. Jesse Lemisch ed., 1961).
　　　2.　Lisa G. Lerman, *Gross Profits? Questions About Lawyer Billing Practices*, 22 HOFSTRA L. REV. 645, 651 (1994). For citations to the large literature on hourly billing's harmful impacts, see WILLIAM G. ROSS, THE HONEST HOUR 1-8 (1996).

Both economic theory and historical experience lead to the same conclusion: The profession was pushed irresistibly to hourly billing by economic pressures that resulted from the introduction of rules that permitted wide-open pretrial discovery.[3] By creating unbearable cost uncertainty for lawyers who handled litigation matters, wide-open discovery forced lawyers, and surprisingly their institutional clients, to demand that the traditional forms of fixed fees be abandoned in favor of hourly billing.

In the middle of this century, the legal profession in the United States experienced two important developments: expanded pretrial discovery followed by the emergence of hourly billing as the primary method of calculating attorney's fees. In 1938, the Federal Rules of Civil Procedure (Federal Rules) implemented an innovative and radical system of broad pretrial discovery.[4] For the first time, all litigants could force their adversaries to provide extensive information about the adversaries' cases. Promiscuous discovery transformed much of litigation. Discovery costs grew to consume a large fraction of litigation expenses.[5] Eventually, as discovery focused lawyers' efforts on pretrial maneuvering rather than trials, most "trial lawyers" became "litigators."

The second development was the emergence of hourly billing. As astonishing as it might seem to lawyers who recently entered practice, the standard billing practice has not always been billing by the hour. Lawyers began to use hourly billing widely only in the last three decades. Until the mid-1960s, the normal fee contract provided for some form of a fixed fee, whether a monthly or yearly retainer, a fixed fee for a given task, or a contingency fee.[6] As we show, a contingency fee is a form of fixed fee.

However, during the 1960s and early 1970s, much of the legal profession switched to hourly billing.[7] Instead of paying a fixed fee, the client would pay for each hour that the lawyer devoted to the client.

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3. Before 1938, federal procedural rules strictly limited pretrial discovery, but the rules required detailed pleading. The new 1938 rules broadened discovery but loosened pleading requirements. For brevity, we lump these procedural innovations together under the rubric of wide-open discovery. For an exploration of both pre-1938 discovery practice and the connection between promiscuous discovery and lax pleading rules, see generally Morgan Cloud & George B. Shepherd, Time and Money: The Creation of the Federal Discovery Rules (1998) (unpublished manuscript, on file with the authors).

4. *See* FED. R. CIV. P. 26-37. For the full text of the 1938 Federal Rules of Civil Procedure, see 1 F.R.D. LXIII-CXLVII (1940).

5. For a discussion of how discovery costs, on average, began to consume more than one-third of litigation costs, see *infra* note 128 and accompanying text.

6. *See infra* Part III.A.

7. The notable exception was contingent fees, which still were used widely by attorneys who represented plaintiffs, particularly in personal injury litigation. *See infra* text accompanying notes 177, 275, 284.

It was not coincidence that hourly billing became dominant after the adoption of rules that encouraged discovery. This article shows that these two fundamental changes in the practice of law were linked. The expansion of discovery in the 1938 Federal Rules, later copied by many of the states,[8] was a substantial factor causing the legal profession to switch from fixed-fee billing to hourly billing for litigation. Related forces caused the profession also to switch to hourly billing for transactional work.

The system of wide-open discovery pushed the legal profession to embrace hourly billing for litigation because discovery increased uncertainty about litigation costs. To explore this connection, we initially describe a theoretical economic model of the conditions under which client and lawyer will choose either fixed-fee or hourly billing. Our model suggests that the optimal contract will be influenced by a balancing of two concerns: efficient risk distribution and limiting "moral hazard"—the moral hazard is the danger that a fixed-fee contract will induce the lawyer to conduct too little work and that an hourly contract will induce excess work. Economic forces will encourage the client and lawyer to choose the contract type that offers the lowest sum of risk costs and costs from moral hazard.

The historical record suggests that, before the expansion of pretrial discovery, the fixed-fee contract tended to be optimal for litigation matters because its combined costs for risk and moral hazard were lower than those for the hourly contract. Lawyers for institutional clients provide a useful example. Because these lawyers tended to be more risk averse than their institutional clients, the fixed-fee contract's shifting of some cost risk to these lawyers was mildly inefficient; the fixed-fee contract required the risk-averse lawyer rather than the more risk-neutral client to absorb unexpected costs. However, the inefficiency was small because, before the introduction of broad discovery, cost uncertainty was small. This small inefficiency was more than made up for by the fixed-fee contract's elimination of the moral hazard to conduct excess billing that an hourly contract would have created.

The model shows that if cost uncertainty increases and lawyers are more risk averse than their clients, then it will be efficient for the lawyer and client to switch to hourly billing. Hourly billing will begin to benefit both the client and the attorney, and both will prefer it and demand it. As cost uncertainty increases, the lawyer's risk-bearing costs under the fixed-fee contract increase. If cost uncertainty increases sufficiently, then the risk costs that the fixed-fee contract imposes on the lawyer will eventually exceed the fixed-fee contract's moral-hazard-reducing benefits. At that point, the lawyer will be better off under hourly billing, even after compensating the client for ac-

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8. *See infra* notes 107-12 and accompanying text.

cepting the cost uncertainty and the moral hazard. After uncertainty increases, the harms that the hourly contract causes by creating an incentive to overbill will be outweighed by the hourly contract's benefits in shifting risk from the risk-averse lawyer to the risk-neutral client. The client and lawyer will be able to reach an hourly fee agreement such that switching to hourly billing benefits both of them. Hourly billing will both efficiently shift risk away from lawyers and reduce clients' legal fees. Hourly billing will be especially attractive if lawyers tend to be relatively loyal to their clients and relatively resistant to the moral hazard. In contrast, fixed-fee billing will remain optimal for clients who are more risk averse than their lawyers, such as in many representations of personal-injury plaintiffs. In these relationships, fixed-fee contracts—such as contingency agreements—both allocate risk efficiently and limit moral hazard. Fixed-fee billing will also be optimal for lawyers who, under an hourly contract, would be very disloyal to their clients by billing excessive hours.

The history of billing for legal services confirms the model's predictions. The adoption of wide-open discovery had two effects. First, wide-open discovery increased uncertainty about a case's litigation costs.[9] Discovery substantially increased the unpredictability of the amount of legal services that a case would require. No one would know whether a case would remain quiet or whether it would explode into a long, time-consuming discovery battle. Because most lawyers had litigated cases under fixed-fee agreements, the increase in cost uncertainty that resulted from wide-open discovery increased lawyers' uncertainty about their incomes. The increase in cost uncertainty had the same impact on lawyers' happiness as an increase in their costs.

Second, in addition to elevating cost uncertainty, discovery directly increased the expected cost of litigating a case, including the value of the lawyer's time.[10] The increase in costs contributed to a decline in real incomes for litigators after 1938.[11] For some law firms, litigation became an unprofitable loss-leader for transactional work. Litigators' incomes declined because, at least in part, price stickiness prevented lawyers from increasing their fixed fees quickly enough to match the sharp jump in expenses that resulted from the new discovery regime.

In the mid-1950s, the profession finally reached its breaking point. The increased uncertainty and decreased incomes finally forced it to act.[12] Litigators, particularly those who represented institutional clients, responded to both problems by switching from fixed-fee bill-

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9. *See infra* notes 113-27 and accompanying text.
10. *See infra* notes 128-40 and accompanying text.
11. *See infra* notes 141-71 and accompanying text.
12. The lag between the initial adoption of the Federal Rules and the switch to hourly billing occurred for three reasons: the profession felt discovery's full force only after state courts mimicked federal courts and also began to offer broad discovery; lawyers learned to exploit

ing to hourly billing. Hourly billing now tended to be optimal for liti-
gators because it efficiently distributed the new cost uncertainty in
litigation away from risk-averse lawyers to less risk-averse institu-
tional clients. For example, according to a lawyer's response to a 1951
survey on discovery, "the possibility of prolonged discovery before
trial made him hesitate to accept retainers."[13] This was "because,
although he could reasonably estimate the time required for other as-
pects of the case, he could not forecast the time required for discov-
ery."[14] On the other hand, because wide-open discovery had increased
uncertainty only for litigation, clients and lawyers initially continued
to rely on fixed-fee billing for transactional work.

Confirming our model's prediction that the increased uncertainty
from discovery would cause hourly billing to benefit both clients and
lawyers, many clients began to demand the change to hourly billing.[15]
Even when faced with the possibility that hourly billing would cause
lawyers to pad their bills, clients decided that it was cheaper for the
client to pay the lawyer by the hour than to pay the large risk pre-
mium that the lawyer would require to take the case on a fixed fee.
Hourly billing probably reduced legal fees below the level that would
have occurred under fixed-fee billing.

The organized bar offered an additional purported reason for
shifting to hourly billing. In response to lawyers' declining incomes—
to which the introduction of broad discovery had contributed—the
American Bar Association (ABA) and other lawyers' organizations
mounted campaigns in the late 1950s to urge lawyers to switch to
hourly billing because of the bar's prediction that hourly billing in-
creased lawyers' incomes.[16] The prediction seemed to come true. Be-
ginning in the mid-1960s, lawyers experienced a large increase in
income.[17] Many lawyers believed that hourly billing deserved credit
for the increase.[18]

However, other factors were probably more important contribu-
tors to the increase in lawyers' incomes. For example, in the 1960s,
soon after the widespread switch to hourly billing began, society's
rules and regulations were suddenly becoming more complicated.[19]
Lawyers' incomes increased in part because society's new complexity
made lawyers' services more valuable. Our model suggests that in-
stead of increasing legal fees, hourly billing actually may have limited

discovery only after several years of experience with it; and the inertia of the profession's many
years of fixed-fee billing deterred a quick move to hourly billing. *See infra* Part III.E.

13.   William H. Speck, *The Use of Discovery in United States District Courts*, 60 YALE L.J.
1132, 1152 (1951) (quoting anonymous survey respondent).

14.   *Id.*

15.   *See infra* notes 199-209 and accompanying text.

16.   *See infra* Part III.D.3.

17.   *See infra* note 281 and accompanying text.

18.   *See infra* text accompanying note 277 and notes 226-30 and accompanying text.

19.   *See infra* notes 279-80 and accompanying and following text.

the increase. This helps explain why clients demanded hourly billing and have continued to demand it: Hourly billing benefited clients.

In the 1960s, cost uncertainty also began to increase for transactional work. Just as broadened discovery had earlier increased cost uncertainty for litigators, increasing complexity in society and the legal system began to increase cost uncertainty for transactional lawyers.[20] As our model predicts, transactional lawyers and their clients then also switched to hourly billing. By 1978, except for contingency representations, the profession had moved to hourly billing for most private-sector legal services.[21]

Our theoretical model also helps to explain why many lawyers continue to litigate personal injury cases under contingency agreements, a fixed-fee variant. An increase in uncertainty makes hourly billing optimal only if the client is less risk averse than the lawyer. Unlike most institutional clients, many personal injury plaintiffs are more risk averse than their lawyers.[22]

Discovery weighted the scales of justice against some of society's most vulnerable groups. Because the introduction of broad discovery increased the effective price of litigating a case, discovery made litigation unaffordable for some people. Litigation's effective price rose because discovery not only increased litigation's expected costs, but it also effectively increased costs further by increasing uncertainty about the costs. By making litigation unaffordable, broad discovery effectively denied vulnerable groups any recourse to lawyers, the courts, and justice.

We proceed as follows. Part II presents an economic model that explains how clients and lawyers choose an optimal fee agreement. Using the model, part III describes how the 1938 federal discovery rules and their state offspring pushed the profession toward hourly billing. Part IV offers conclusions, including our model's explanation of why, in recent years, clients and their lawyers again have begun to experiment with fixed-fee billing. The model shows that fixed-fee billing may now be optimal, at least for some clients and lawyers, because law firms are much larger than before and because of an apparent increase in some lawyers' tendency to be disloyal to their clients. The interaction of risk tolerance and moral hazard that originally drove lawyers and clients to rely on hourly billing is now pushing them to find other methods that suit new circumstances.

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20. *See infra* notes 279-80 and accompanying text.

21. *See infra* notes 271-76 and accompanying text.

22. In addition, the contingency agreement permits the lawyer in effect to loan litigation funding to a client who would otherwise lack sufficient resources to litigate. *See infra* text accompanying notes 87-88.

II. A Theoretical Economic Model of Legal Fees, Risk, and Uncertainty

To explore the impact of the availability of discovery on billing practices for legal services, we develop a theoretical economic model of how a client and her lawyer choose a type of contract for the provision of the services. Although our focus is on contracts for litigation services, the model applies with equal force to the choice of contract for providing transactional legal services, such as negotiating and drafting contracts. Indeed, the model helps to explain why lawyers and clients adopted hourly billing not only for litigation services, but also for transactional work.

Our model demonstrates that the choice between fixed-fee and hourly billing will depend in part on a balancing of concerns about the efficient distribution of risk against concerns about moral hazard. The client and lawyer balance a desire to shift the risk of uncertain litigation costs to whomever can bear the risk most easily against the client's desire to eliminate incentives for the lawyer to act in a way that does not promote the client's interests.[23]

After describing various types of contracts, we examine how each type distributes risk between lawyer and client. Next, we note the differing incentives that the various contracts create for the lawyer to conduct insufficient or excessive work. Finally, we offer both a model of how lawyer and client choose a contract type and the model's predictions about the impact on their choice of the introduction of broad pretrial discovery.[24]

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23. This model does not explore other possible influences on the choice of the optimal fee agreement, such as the level of uncertainty as to the size of the plaintiff's eventual recovery. For a discussion of other sources of uncertainty, see P. J. Halpern & S. M. Turnbull, *An Economic Analysis of Legal Fees Contracts*, in LAWYERS AND THE CONSUMER INTEREST: REGULATING THE MARKET FOR LEGAL SERVICES 161 (Robert G. Evans & Michael J. Trebilcock eds., 1982).

24. Other models have investigated some aspects in other contexts of the relation between risk distribution and moral hazard in determining the efficient contract. Investigations of the efficiency of various agricultural share-tenancy contracts include STEVEN N. S. CHEUNG, THE THEORY OF SHARE TENANCY 62-87 (1969) (noting competing concerns of risk bearing and moral hazard in agricultural share-tenancy contracts, but not addressing the impact of differing levels of risk aversion by landlord and tenant) and Keijiro Otsuka et al., *Land and Labor Contracts in Agrarian Economies: Theories and Facts*, 30 J. ECON. LITERATURE 1965 (1992) (reviewing literature on share-tenancy contracts). For models of the interaction among moral hazard, risk aversion, and outcome uncertainty in the general principal-agent relationship, see generally Milton Harris & Artur Raviv, *Optimal Incentive Contracts with Imperfect Information*, 20 J. ECON. THEORY 231 (1979); Bengt Holmstrom, *Moral Hazard and Observability*, 10 BELL J. ECON. 74 (1979); Jean-Jacques Laffont, *The New Economics of Regulation Ten Years After*, 62 ECONOMETRICA 507 (1994) (reviewing recent models of efficient contracting in general principal-agent relationship); Steven Shavell, *Risk Sharing and Incentives in the Principal and Agent Relationship*, 10 BELL J. ECON. 55 (1979). Other papers have focused on the interaction of risk and moral hazard in contracts for the government's procurement of military equipment. *See, e.g.*, FREDERIC M. SCHERER, THE WEAPONS ACQUISITION PROCESS: ECONOMIC INCENTIVES (1964); David P. Baron & David Besanko, *Monitoring, Moral Hazard, Asymmetric Information, and Risk Sharing in Procurement Contracting*, 18 RAND J. ECON. 509 (1987); Anthony G. Bower, *Procurement Policy and Contracting Efficiency*, 34 INT'L ECON. REV. 873 (1993); R. Preston

A.   Types of Contracts

A lawyer and client commonly choose one of two contract types, or some variant.

1.   The Fixed-Fee Contract and the Contingency-Contract Variant

A client who seeks legal services, whether litigation or transactional work, might choose to have a fixed-fee agreement with her lawyer. Under a fixed-fee agreement, the lawyer agrees to complete specified legal tasks for the client, whether litigating a case or drafting a contract, for a fixed payment. For example, the client might agree to pay the lawyer a fixed fee of $10,000 to handle a case. This amount would be the lawyer's only fee, regardless of the cost to the lawyer of litigating the case and regardless of the case's outcome. Similarly, the client might agree to pay the lawyer a fixed retainer for performing all of the client's legal work for the year. A retainer is a fixed-fee agreement that covers a period of legal services rather than a specified legal task. In all of these arrangements, the client pays a fixed price for a completed service, rather than reimbursing the lawyer for the lawyer's costs, including the hourly value of the lawyer's time.[25] Many lawyers and clients used fixed-fee contracts until the 1960s.[26]

The fixed-fee contract resembles piece-rate contracts in many other parts of the economy. A consumer pays Toyota a per-car price for a Toyota Camry, rather than agreeing to pay Toyota for the cost of the steel plus $35 per hour for as many hours as it takes for Toyota's workers to assemble the car. A patron pays a restaurant the menu's specified price for a prime rib dinner; the patron does not agree to reimburse the restaurant for the cook's hourly wage and for the cost of the beef.

Likewise, the government purchases many goods and services under "fixed-price contracts," another name for fixed-fee contracts. For example, the military has long purchased most of its armored personnel carriers, rifles, ammunition, and clothing under fixed-price contracts: The military pays its suppliers a fixed price per M-16 or per pair of dress khaki trousers—rather than reimbursing the suppliers for the suppliers' costs of labor and materials.[27]

McAfee & John McMillan, *Bidding for Contracts: A Principal-Agent Analysis*, 17 RAND J. ECON. 326 (1986); Martin L. Weitzman, *Efficient Incentive Contracts*, 94 Q.J. ECON. 719 (1980).

    25.   Under another variant of the fixed-fee contract, the client will agree both to pay a fixed fee and to reimburse the lawyer for certain "costs," such as copying costs and filing fees. Because the "costs" do not include the value of the lawyer's time, the costs are usually relatively minor in comparison to the total fees in the case. Under such a contract, the total fees that the client will pay will still be more certain than under an hourly contract, where payments will vary depending on how much time the attorney devotes to the case. *See, e.g.*, AMERICAN BAR ASS'N SECTION OF LAW PRACTICE MANAGEMENT, WIN-WIN BILLING STRATEGIES 161 (Richard C. Reed ed., 1992).

    26.   *See infra* Part III.E.

    27.   *See* SCHERER, *supra* note 24, at 146-47. For reports on the military's recent and continued use of fixed-price contracts, see, e.g., *Raytheon Wins $243 Million USD Missiles Contract*,

A contingency agreement is a variant of the fixed-fee contract. Under a contingency agreement, the plaintiff pays her lawyer a percentage of her recovery, often one-third. As with a fixed-fee contract, a contingency agreement does not directly reimburse the lawyer for additional time that she devotes to a case.[28] The lawyer will receive a fixed amount—a fixed fraction of her client's recovery—regardless of how many hours and other resources the lawyer devotes to the case.[29]

2. The Hourly Contract

Alternately, the client and lawyer could agree on an hourly contract. The client pays a per-hour fee for the time that the lawyer devotes to the client's matter. The total fee that the client pays varies with the cost to the lawyer of providing the representation, depending on how many hours the lawyer devotes to the representation. For example, in the litigation context, if the lawyer devotes more time than expected to a case, then the lawyer receives an additional payment.

Some other parts of the economy use such contracts. Often, a homeowner who hires a teenager to mow the lawn will pay a per-hour rate for as many hours as the teenager requires to mow the lawn, rather than pay a fixed fee. A property owner will pay an architect by the hour to develop a design for a house. The property owner might then pay a contractor for constructing the house on a "time-and-materials" basis.

The standard lawyer's hourly fee contract resembles a type of government procurement contract that was used until World War II. Under what we call a "cost-plus-percentage" contract, the U.S. military would agree to reimburse the supplier's costs plus an additional percentage of the costs.[30]

The cost-plus-percentage contract is identical to the lawyer's hourly contract. A lawyer who is being paid by the hour receives no fixed payment, as she would under a fixed-fee contract. Instead, the lawyer's hourly fee covers not only all of the lawyer's costs, including employee costs and overhead costs, but also adds an amount for profit.[31] The lawyer absorbs none of the additional costs that she in-

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AFX News, June 22, 1998; *Briefs—AMRRAM Export Orders*, JANE'S MISSILES & ROCKETS, May 1, 1998, at 15.

28. Contingent fee contracts typically make the client responsible for litigation costs other than attorney's fees. These costs are deducted from the client's share of any recovery. The costs are usually small compared to the value of the attorney's time. *See Retainers—A Symposium, in* MANAGING THE LAW OFFICE 251, 262 (Daniel J. Cantor ed., 1964).

29. It is possible that a lawyer on a fixed fee or contingency may indirectly receive reimbursement for additional hours devoted to the case. For example, additional hours that the contingency attorney devotes to the case may increase the size of the plaintiff's recovery, which will, in turn, increase the lawyer's fee. Our analysis focuses on the direct effects, not on indirect factors.

30. *See* SCHERER, *supra* note 24, at 140-41.

31. The lawyer's yearly income will equal: (hours billed)(hourly rate) = employee costs + overhead + profit. *See* William Kummel, Note, *A Market Approach to Law Firm Economics: A*

curs. The hourly fee necessarily includes an amount for profit because, if a lawyer's fee did not include profit, then the lawyer and his law firm would fail. Standard economic analysis shows that lawyers who remain in a competitive legal market must be receiving at least a competitive rate of profit as part of their hourly fee. If they did not receive a reasonable profit, then they would eventually leave the market and enter another occupation where they could earn such a profit.[32] For example, a law firm may charge $250 per hour for one of its senior associates. Of this amount, $200 covers the firm's overhead and the associate's salary. The other $50 is profit, and the firm's profit margin is 25%.

The lawyer's hourly contract resembles another form of government procurement less closely. The federal government does not arrange to pay a per-unit fixed price for much of the complex and sophisticated equipment that it buys. Nor does the government pay the supplier the supplier's costs plus an additional percentage of its costs, as was common until World War II. Instead, the government agrees both to reimburse the supplier for the supplier's costs and to pay the supplier an additional *fixed* amount for its profits.[33] We call these contracts "cost-plus-fixed-fee" contracts. Unlike with the cost-plus-percentage contract, where the supplier's profit varies with the supplier's costs, the additional profit amount that the cost-plus-fixed-fee contract offers remains the same regardless of the costs.

For example, for producing 100 fighter planes, the supplier might receive from the government reimbursement of $203 million for the costs that it incurred on the project for expenses such as salaries for its employees and overhead costs. In addition, the supplier might receive a payment, arranged in advance, of $25 million. The $25 million would provide the supplier with a profit to supplement the reimbursement of its costs. For a firm to survive in the long run, the firm's revenues must not only cover its costs, but also provide a reasonable market profit rate.[34]

New Model for Pricing, Billing, Compensation and Ownership in Corporate Legal Services, 1996 COLUM. BUS. L. REV. 379, 383-84.

32. *See, e.g.*, WALTER NICHOLSON, INTERMEDIATE MICROECONOMICS AND ITS APPLICATION 183, 291 (4th ed. 1987).

33. *See* SCHERER, *supra* note 24, at 140-41, 146-47.

34. The costs that the government would reimburse would be accounting costs, which do not include any profit. However, economic theory indicates that the cost of producing a good includes a reasonable profit on the capital that was used to produce the good. This is because the supplier's devotion of resources to production of this good prevented the supplier from producing some other good and earning a profit on that good; that is, a producer's cost of producing a good includes the opportunity cost of the resources that the supplier devoted to producing the good. So, to economists, a supplier's cost of producing a good would include both accounting costs and a fair profit. Traditional cost-plus pricing, in its effect, reimburses accounting costs and a reasonable profit, the same as what economists call "cost." *See* N. GREGORY MANKIW, PRINCIPLES OF MICROECONOMICS 265-67 (1998).

B. Risk Aversion and the Risk Premium

The optimal type of contract for providing legal services will depend, in part, on the client's and lawyer's aversion to risk and on the uncertainty as to the costs of providing the services.

1. Risk Aversion

The client and lawyer may each be risk averse to some degree: Each might prefer to pay or receive a fixed amount rather than to undertake a gamble in which the outcome may be low or high, but in which the expected outcome is the same as the fixed amount. For example, the client or attorney might prefer to pay a fixed amount of $10,000 rather than to submit to a 1% risk of losing $1 million, even though the expected loss from the gamble is also $10,000. Risk aversion creates the insurance industry. A homeowner pays an insurance company a premium of $12,000 to insure the homeowner against the 1% risk that fire will destroy her home worth $1 million. The insurer greatly reduces its risk, or even eliminates it, by diversification. Because it insures many homes, the insurer can expect to predict reliably how many will burn each year. The difference between the $12,000 premiums and the $10,000 payouts that, on average, the insurer makes covers the insurer's administrative costs and profit.

Clients' and lawyers' levels of risk aversion will vary. For a given matter, an individual client will generally be more risk averse than a large, corporate client. Economists usually assume, for two reasons, that a corporation will not be risk averse at all, but will instead be risk neutral.[35] First, like an insurance company, a large corporation will be able to diversify its risks. Suppose that there is a 99% probability that costs for litigating a case will be $1000, a 1% chance that costs will be $100,000, and that the client will pay the costs. The large corporation will be more willing than an individual client to bear this risk. Because the corporation is litigating hundreds of similar cases, the rare case when costs explode will be balanced by the scores of other cases where the costs are small. Although the litigation cost for a single case is uncertain, the costs for all of the cases taken together are predictable.[36] Second, the corporation may have a large number of owners,

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35. *See, e.g.*, RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW 464 (5th ed. 1998); Henry Hansmann & Reiner Kraakman, *Toward Unlimited Shareholder Liability for Corporate Torts*, 100 YALE L.J. 1879, 1882 n.6 (1991); Susan Rose-Ackerman, *Against Ad Hockery: A Comment on Michelman*, 88 COLUM. L. REV. 1697, 1705-06 (1988).

36. This requires an assumption that the cost levels in the cases are independent, so that, over many cases, the low-cost cases will balance out the high-cost cases. Although this will generally be true, situations might sometimes occur in which costs are correlated. For example, a company might sell a defective new drug that injures many. The litigation costs in each of the many resulting personal injury suits are all unusually high because the cases all require expert scientific testimony. That the corporation is defending many such suits will not prevent the corporation's legal bill from being much higher than usual; due to the link among the cases, a higher

each of whom can diversify risks by selecting a portfolio of other investments.

In contrast, for the individual client who is litigating just a single case, the risk from the case will be large and costly. The individual client has no portfolio of cases across which the client can diversify the cost risk. If the client is unlucky, and costs explode to $100,000, then the client may well be ruined; if his assets are less than the costs, then the client may face bankruptcy.

Similarly, a large law firm will be less risk averse than either a small law firm or a lawyer in solo practice. Suppose again that there is a 99% probability that costs for a case will be $1000 and a 1% chance that costs will be $100,000, but that the law firm, not the client, will pay the costs. A large law firm, with many similar cases, will face little risk because the risk from any one case will be diversified across all of the other cases. The firm will know that the occasional unprofitable high-cost case will be balanced by the other profitable low-cost cases. In contrast, a small firm with one or two lawyers, for which a single case is a large part of the firm's work, will be very nervous about this risk. An explosion of costs in the case might eliminate both the firm's profits and the lawyers' incomes.

For both client and lawyer, risk is a cost, just like any other cost. Just as a lawyer will charge a higher fixed price for a case that she expects to require more hours and greater photocopying costs, the lawyer will charge more for a case that imposes greater costs in the form of more risk. A homeowner will pay for insurance to eliminate the risk of financial loss from her home's destruction by fire. Likewise, a lawyer will demand a higher fixed price for a case with greater cost uncertainty. The lawyer will need to charge more for a case with given expected costs and high cost uncertainty than for a case with the same expected costs but no cost uncertainty. This additional amount that the lawyer will charge because of the risk is called the "risk premium."

A competitive market will force the client to pay the risk premium. Economics teaches that to induce producers to remain in the market, consumers' payments must cover producers' costs, at least in the long run. Any producer, such as a lawyer, who fails to cover his costs, including both risk costs and the opportunity cost of the greater income that the producer could have earned in another profession, will eventually leave the market.[37] For example, in the late 1950s, incomes for litigators fell substantially, especially in relation to incomes for other professions.[38] As a result, some litigators switched to transactional work, and applications to law schools declined.[39]

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proportion than normal of cases had high costs. *See* Hansmann & Kraakman, *supra* note 35, at 1882 n.6.

37. *See, e.g.*, NICHOLSON, *supra* note 32, at 291.
38. *See infra* text accompanying notes 142-64.
39. *See infra* text accompanying notes 156-57, 163-64.

2.   *Contract Types and Allocation of Risk*

The fixed-fee contract and the hourly contract allocate the risk of cost uncertainty differently. The fixed-fee contract shifts the risk of cost uncertainty entirely from the client to the lawyer.[40] Because the client pays a fixed amount, the client confronts no uncertainty about her legal costs; the client pays the same amount regardless of whether the lawyer must devote little time and expense to the matter or a lot. In return for the fixed fee, the lawyer agrees to pay for all legal costs of the case or transaction, including the cost of his time, regardless of the level of these costs.[41] In effect, under a fixed-fee agreement, the lawyer insures the client against uncertain legal costs. For a fixed fee, which effectively includes an insurance premium, the lawyer agrees to incur all of the case's or transaction's costs, whether they turn out to be large or small. Because the lawyer's net income from the case or transaction is the fixed fee minus costs, any uncertainty about costs creates equal uncertainty about net income. Assuming that the lawyer is risk averse, the lawyer will demand from the client an extra amount beyond the expected cost in order to be willing to incur this risk. Like a homeowner buying insurance, the risk-averse client pays the extra risk premium to avoid the risk from the cost uncertainty.

The contingency agreement resembles other fixed-fee agreements in its allocation of risk: Like other fixed-fee agreements, the contingency contract shifts risk from the client to the lawyer. Under hourly billing, the client would bear two risks. First, the client would bear the risk of the unpredictable size of the judgment: The client does not know in advance whether the judgment will be large or small. Second, the client cannot predict perfectly the amount of litigation costs.

The contingency contract shifts both of these risks partially from the client to the lawyer. The contingency contract reduces the variation in the size of the judgment that the plaintiff will receive after deducting attorneys' fees. Suppose that, in a given case, the range of possible judgments that the jury will award is zero to $1 million. Under hourly billing, the client would bear the full $1 million range of uncertainty. In contrast, a standard one-third contingency contract would reduce the range of uncertainty. Because the lawyer's fee would be one-third of any recovery, the range of amounts that the client might receive would be narrowed by one-third. The smallest amount that the client could receive would still be zero, but the largest amount would be reduced to $666,666.

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40.   Lawyers recognize this. In an article on various alternative billing methods, a partner in a Wisconsin law firm recently wrote, "Flat fee billing shifts the risk of the lawsuit's fee profitability to the attorney." Rodney D. Seefeld, *Billing Alternatives*, 33 L. OFF. ECON. & MGMT. 139, 140 (1992).

41.   The fixed-fee contract contrasts with the cost-plus-fixed-fee contract, in which the client both reimburses the lawyer's costs and pays the lawyer a fixed fee. *See supra* text accompanying notes 33-34.

Likewise, the contingency contract shifts to the lawyer the risk caused by cost uncertainty. Suppose that because of uncertainty from discovery the client does not know whether the case will take 100 hours to litigate, 500 hours to litigate, or somewhere in between. Under hourly billing, the risk from this uncertainty falls completely on the client. In contrast, under a contingency-fee contract, the cost uncertainty falls on the lawyer. The client pays the same contingency fee regardless of whether the lawyer devotes many hours to the case or few.[42]

In contrast to the fixed-fee contract and the contingency variant of it, the hourly contract shifts all cost uncertainty to the client. The hourly contract protects the lawyer from the risk of financial loss from a case or transaction with unexpectedly high costs. Regardless of whether costs turn out to be large or small, the hourly contract reimburses the lawyer fully for her costs, reducing the lawyer's income uncertainty.[43]

Instead, the client bears all of the risk from uncertain costs. The client's legal fees will be low if the case or transaction requires little time and expense for the lawyer to litigate. The client's legal expenses will be high if the case or transaction unexpectedly requires much of the lawyer's time.

Because the client bears the risk under an hourly agreement, a competitive market for legal services should allow the client to bar-

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42. Richard Posner notes briefly how contingency fees reduce the client's risk in the size of the judgment that the plaintiff will receive after paying attorneys' fees. Posner does not focus on how contingency fees also reduce the client's cost uncertainty. *See* POSNER, *supra* note 35, at 625.

43. Unlike a fixed-fee contract, an hourly contract will help the lawyer to predict accurately the yearly income that she will earn. In a competitive market, a market-clearing hourly wage will exist at which the attorney can obtain as much work as she seeks. The lawyer's yearly income is relatively predictable under an hourly contract because she receives the market wage rate for every hour that she chooses to work. For example, suppose that a case that a lawyer is litigating under an hourly contract requires fewer hours to complete than expected. Then the lawyer can fill the unused time with work on other cases at the market wage level. Although the income from the unexpectedly short case is less than expected, the lawyer makes up for it by using the free hours to work on other cases at the market wage rate. Conversely, a case with unexpectedly high time demands will not unexpectedly reduce the lawyer's yearly income. Although the extra time on the case reduces the time that the attorney can earn money on other cases, the hourly contract reimburses the attorney for the extra time. Under the hourly contract in a perfectly competitive market, a case's unexpectedly low or high time demands do not change the lawyer's yearly income.

In contrast, litigating a case under a fixed-fee agreement increases the lawyer's income uncertainty. The lawyer's yearly income becomes unpredictable because the lawyer's income will vary inversely with the length of time that the case ends up requiring. For example, a case under a fixed-fee agreement that requires an unexpectedly low number of hours to litigate will cause the lawyer's yearly income to be higher than expected. Despite the case's unexpected brevity, the lawyer receives her full fixed fee. However, the lawyer may also use the free time to augment her income by working on other cases. Conversely, unexpectedly high costs and time demands will reduce the lawyer's yearly income unexpectedly; the lawyer will unexpectedly have less time to earn money on other matters. For a discussion of why, in other contexts, an hourly wage minimizes risk for the worker, see CHEUNG, *supra* note 24, at 75 (arguing that, compared to other contracts for agricultural share tenancy, under an hourly wage contract "the tenant's income variance is reduced to zero").

gain for an hourly rate that produces a lower total legal bill than if the client had insisted on a fixed price. The risk-averse lawyer will be willing to work for a lower expected total amount if the contract eliminates his risk as to costs. The risk-averse client will demand a risk premium in the form of a price reduction in order to be willing to incur the cost risk.

C. Moral Hazard and Excessive Cost

. · In addition to distributing risk, the contract between client and lawyer creates incentives that guide the lawyer's behavior. A contract may, or may not, align the lawyer's interests with the interests of the client. This is an example of what economists call the "principal-agent problem":[44] how to arrange incentives to induce the agent (here, the lawyer) to behave as the principal (the client) would want. Moral hazard exists when a contract causes the interests of the principal and agent to diverge—when the contract creates an incentive for the lawyer to behave in ways that are not in the client's best interests.[45]

·· Both the fixed-fee contract and the hourly contract create moral hazard, but of different types. The fixed-fee contract creates an incentive for the lawyer to devote too little work to the client's case or transaction—that is, to shirk. Under a fixed-fee contract, the lawyer has an incentive to economize on her time. She has no incentive to pad her hours. Because the client pays the lawyer no additional amount for the lawyer's additional work, every minute of extra time that the lawyer devotes to the matter reduces the lawyer's income. By spending additional time on this client's matter, the lawyer sacrifices income that she could have earned by instead devoting the time to other matters. Every minute that the lawyer eliminates on this client's matter is an additional minute with which she can earn income elsewhere.

The lawyer's incentive under a fixed-fee contract to reduce costs might even extend to reducing costs below the level that is optimal for the client. The fixed-fee contract pays the lawyer the same fee regardless of the lawyer's level of work. The lawyer has an incentive to devote too little work to the matter because, although the lawyer bears the costs, the client, not the lawyer, reaps the benefits. Suppose that the lawyer is considering drafting a motion that the lawyer estimates would benefit the client $1000. Drafting the motion would require two hours of the lawyer's time, for which the lawyer could earn $400 from other clients. Although the motion's benefits to the client exceed its costs by $600, the lawyer may have an incentive to shirk his

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44. *See generally* NICHOLSON, *supra* note 32, at 257-62.
45. *See* PAUL MILGROM & JOHN ROBERTS, ECONOMICS, ORGANIZATION & MANAGEMENT 168 (1992).

duty to the client and not draft the motion. The lawyer will pay the motion's $400 cost, but he would receive none of the $1000 benefits.

Similarly, the lawyer under a contingency agreement, as under other fixed-fee agreements, has an incentive to do too little work because the lawyer does not receive the full benefit of the additional work that he does for the client. If a lawyer under a one-third contingency agreement does two hours of work that increases the plaintiff's recovery $1000, the lawyer receives only $333. The lawyer has an incentive not to devote the two hours to the case if, as we assumed before, the lawyer could earn a larger $400 for the two hours on another case.

In contrast, the hourly contract creates a strong incentive for the lawyer to conduct unnecessary work. In an hourly contract, the lawyer receives no fixed fee. Instead, the fee that the lawyer receives for each hour of work not only reimburses the lawyer for the cost of her time, but also provides the lawyer with an additional amount of profit. Moral hazard exists because the lawyer profits from each additional hour that the lawyer devotes to the client's matter, regardless of whether the additional hour benefits the client. The more billable hours, the more profit that the lawyer receives.

For these same reasons, the federal government has prohibited the use of the cost-plus-percentage contract for military procurement. During the 1940s, the federal government recognized that the cost-plus-percentage contract, like the hourly contract for legal services with which it is identical,[46] induced waste and profiteering. Because the contract provided additional profit for any additional costs that the supplier incurred, the contract created an incentive to inflate costs. To eliminate this waste, the First War Powers Act of 1941[47] and the Armed Services Procurement Act of 1948[48] prohibited such contracts.

Not all lawyers will succumb to the moral hazard. Several forces may constrain an attorney's willingness to be disloyal to his client by shirking under a fixed-fee contract or by padding his hours under an hourly contract. Many lawyers are simply unwilling to be disloyal to their clients. Ignoring selfish incentives, many attorneys comply both with their ethical responsibility to act in their clients' best interests and with their own personal commitment to honest excellence.[49] In addition, attorneys may fear that their clients will fire an attorney who performs too little work or who bills excessive hours. Because lawyers are often what economists call "repeat players," a lawyer might choose not to exploit the client in a given case. The lawyer would hope

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46. *See supra* text accompanying notes 31-32.
47. First War Powers Act of 1941, 55 Stat. 838 (1941) (repealed 1966).
48. Armed Services Procurement Act of 1948 § 2, 10 U.S.C. § 2306(a) (1995). *See* SCHERER, *supra* note 24, at 141.
49. For a discussion of the influence of lawyers' willingness to be disloyal on the choice of attorney-client fee arrangement, see *infra* Part II.D.5.

that his frugal performance in this case would induce the client to hire the lawyer again for the next case. The constraint may be weak. An attorney can often convince an inquiring client that the attorney's chosen level of effort is appropriate, even if the level is inappropriate. Just as a patient must rely on her doctor's judgment in deciding her treatment, a client often must rely on her attorney's judgment in evaluating the attorney's activities. Finally, although clients at a law firm might pay the firm on an hourly basis, many associates at law firms receive fixed salaries that do not vary with their firms' profits. An associate on a fixed salary sometimes may have little incentive to do excess work. However, a countervailing pressure to pad hours will exist for the many associates who receive bonuses or promotions to partnership based in part on the number of hours that they bill.[50]

D. A Model of the Choice of Contract Type

In choosing between a fixed-fee contract and an hourly contract, the client and lawyer will weigh the benefits of reducing risk cost against the costs of the moral hazard that each type of contract might create.[51] Because the client and lawyer can share any savings from reducing the costs from moral hazard and from risk, they will have an incentive to choose the contract that imposes the lowest sum of costs from moral hazard and from risk. Table 1 compares the total costs for the two contract types.[52]

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50. Contracts between the two extremes of the fixed-fee contract and hourly contract create intermediate levels of moral hazard; they create an incentive, but an imperfect one, for the lawyer to reduce costs. The Mathematical Appendix explores intermediate contracts further.

51. The cost of the moral hazard will be the smaller of, first, the cost of the harm that the moral hazard causes and, second, the cost of detecting and suppressing the moral hazard's harm. For example, suppose that the attorney and client have agreed to an hourly contract and that the client expects that, if the client does not monitor the attorney, the attorney will bill $10,000 of unnecessary hours. However, the client could also hire an independent auditor for $4000 to monitor the attorney and assure that the attorney bills no unnecessary time. The cost of the moral hazard would be the $4000 monitoring cost; it is cheaper for the client to prevent the moral hazard's harms than to endure the harms. Suppose instead that monitoring and eliminating the unnecessary billing would require the client to devote $12,000 of her own time, or the time of an auditor, to check the lawyer's billings. The cost of the moral hazard will be $10,000; it will be cheaper for the client to endure the moral hazard's harms than to prevent them.

52. Other factors may influence the choice of contract. For simplicity, our model focuses only on the important influences of moral hazard and risk.

TABLE 1
THE COSTS OF EACH CONTRACT TYPE

	Fixed-Fee Contract's Cost	Hourly Contract's Cost
Cost of Moral Hazard	(detriment to client because fixed fees induce too little work)	(detriment to client because hourly billing induces excess work)
	+	+
Cost of Risk Bearing	(fixed fee's risk cost to lawyer)	(hourly billing's risk cost to client)

Each contract's total cost is the sum of the costs of the moral hazard and risk that the contract imposes. For the fixed-fee contract, the total cost is the sum of the cost to the client that occurs because the contract may induce the lawyer to do too little work and the risk cost to the lawyer that occurs because the contract shifts risk to the lawyer, causing the lawyer's costs and profits to be uncertain. Likewise, the total cost of the hourly contract is the sum of the detriment to the client that occurs because the contract may induce excessive work and the client's risk cost that occurs because the contract shifts any cost uncertainty to the client.

The model offers the following five predictions about the conditions that will cause a client and lawyer to choose a fixed-fee contract or an hourly contract. A technical model in the mathematical appendix to this article reaches the same conclusions.

1. The Influence of Moral Hazard

In choosing between a fixed-fee contract and an hourly contract, the client and lawyer have an incentive to consider carefully the costs from moral hazard under each contract. The costs will depend on the degree to which the lawyer is expected, under each contract, to be disloyal to the client. If the client expects that a fixed-fee contract will cause the lawyer to shirk substantially but that an hourly contract will not cause much excessive billing, then the client and lawyer will tend to choose an hourly contract. In table 1, the hourly contract will create smaller costs from moral hazard than will the fixed-fee contract. In contrast, if the client believes that shirking under a fixed-fee contract seldom occurs, but that excessive billing under an hourly contract occurs frequently, then the client and lawyer will tend to choose a fixed-fee contract. In that case, the expected costs from moral hazard will be lower with the fixed-fee contract than with the hourly contract.

2. The Influence of Relative Risk Aversion

In addition to considering the costs of moral hazard under each contract type, the client and lawyer will examine the risk costs that each contract imposes. The risk costs from each contract will depend on the client's and lawyer's risk aversion. The fixed-fee contract's risk

cost will be larger the more risk averse is the lawyer. The hourly contract's risk cost will be larger the more risk averse is the client.

Our model shows that the more risk averse is the lawyer in comparison to the client, the more optimal is an hourly contract and the less optimal is a fixed-fee contract. If the lawyer is more risk averse than the client, then the hourly contract efficiently shifts risk from the risk-averse lawyer to the client, who can bear the risk more easily. Table 1 shows that the more risk averse is the lawyer relative to the client, the higher the fixed-fee contract's risk costs relative to the hourly contract's risk costs. For example, suppose that the lawyer is more risk averse than the client. In table 1, the hourly contract has lower total risk costs than the fixed-fee contract because the hourly contract shifts risk to the client, who bears risk more easily. At the extreme, if the client were completely risk neutral—such as a large corporation that litigates a diverse portfolio of cases[53]—then the hourly contract would eliminate risk costs completely. Although the contract shifts risk to the client, the client is indifferent to risk.

For the same reasons, the larger the client's risk aversion compared to the lawyer's risk aversion, the more optimal is a fixed-fee contract. The higher the client's relative risk aversion is, the higher the risk costs under an hourly contract are compared to the risk costs under the fixed-fee contract. A fixed-fee contract shifts risk from client to lawyer. If the client is more risk averse than the lawyer, then the fixed-fee contract has lower risk costs than the hourly contract.[54]

3.   The Interaction of Risk Aversion and Moral Hazard

As table 1 shows, to choose a contract type, the client and lawyer have an incentive to consider the costs both of moral hazard and of risk bearing. Ideally, the contract would simultaneously offer the lowest possible costs from moral hazard and the lowest possible risk-bearing costs. But it is possible that the client and lawyer will choose a contract type with higher costs from moral hazard in order to eliminate an even greater risk-bearing cost, or vice versa.

The following are two examples of how different levels of moral hazard and risk aversion might influence the choice of contract. First, we consider an example where concerns for moral hazard and risk distribution do not conflict, but instead both concerns point to one

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53. *See supra* text accompanying notes 35-36.
54. Changes in relative risk aversion will alter the optimal contract. For example, if, over time, the lawyer's level of risk aversion declines substantially in relation to the client's level, then the optimal contract will shift from an hourly contract to a fixed-fee contract. With the lawyer becoming less risk averse, changing from an hourly contract to a fixed-fee contract shifts risk to the lawyer who can now more easily bear the risk, and so reduces the client's and lawyer's combined risk costs. This may already be happening. As law firms have become larger and less risk averse, they have begun to experiment with various forms of fixed-fee billing. *See infra* text accompanying notes 289, 292-94.

contract type. Suppose that a fixed-fee contract would create little moral hazard because the client would easily detect shirking by the lawyer but that an hourly contract would create a great danger of excessive billing. In addition, suppose that the client is much more risk averse than the lawyer. Then the client and lawyer will choose a fixed-fee contract; the sum of the costs from moral hazard and risk bearing is lower for the fixed-fee contract than for the hourly contract. The fixed-fee contract produces not only the lowest costs of moral hazard, but also the lowest risk-bearing costs; the fixed-fee contract shifts the risk to the lawyer, who bears risk more easily than the client. The fixed-fee contract will benefit the client by both shifting risk to the lawyer and reducing the expensive moral hazard. In exchange for accepting the risk and agreeing to eliminate the moral hazard, the lawyer can demand, and the client will be willing to pay, a larger fixed fee. By switching from an hourly contract to a fixed-fee contract, the client will be better off even after compensating the lawyer for bearing the increased risk.

Second, we consider an example where the concerns of moral hazard and risk distribution conflict; the optimal contract will depend on which concern is greater. Suppose, as before, that an hourly contract would create worse moral hazard than a fixed-fee contract. However, now suppose that the lawyer is more risk averse than the client but that the costs of the case are relatively predictable. If only risk-bearing costs were considered, then the hourly contract would be optimal; it would shift the little risk that exists to the client, who bears it most cheaply. However, if we consider the costs of both risk and moral hazard, the fixed-fee contract would be optimal. Although the fixed-fee contract would increase risk-bearing costs slightly, it would reduce substantially the cost from moral hazard. The fixed-fee contract would produce the lowest sum of risk-bearing costs and costs from moral hazard.

4. The Influence of Increased Cost Uncertainty

The model predicts that if uncertainty about the cost of performing individual legal tasks increases, then, if lawyers are more risk averse than clients, the legal profession will tend to switch away from fixed-fee contracts for the tasks to hourly contracts. Because the hourly billing will benefit both client and lawyer, both will demand it. We show this here in two ways: intuitively and graphically. The mathematical appendix demonstrates it with a technical model.

a. Intuitive Discussion

We now show that, if an increase in uncertainty about the cost of performing a given legal task occurs, then it will be in the interests of both the client and lawyer to choose a contract that shifts the new risk

to whichever of them can bear the increased risk most cheaply. That is, they will shift the increased risk to whomever is less risk averse. For example, suppose that, initially, the lawyer and client have chosen a fixed-fee contract for litigating a case; given the level of uncertainty and the client's and lawyer's expectations about moral hazard under the two contract types, the client and lawyer have decided that the fixed-fee contract provides the smallest sum of costs from moral hazard and risk bearing.

If the lawyer is more risk averse than the client, then continuing increases in cost uncertainty will eventually cause the client and lawyer to change from a fixed-fee contract to an hourly contract; the optimal contract moves toward an hourly contract. Because the client and lawyer can save some risk cost by shifting risk to the client, savings can be shared in some proportion between client and lawyer. If uncertainty becomes large enough, the lawyer will be better off after shifting the risk to the client even if the lawyer compensates the client fully for accepting the risk. The lawyer might induce the client to accept an hourly contract by offering an hourly billing rate that would produce lower expected total payments for litigating the case than under the fixed-fee contract. A deal will be able to be worked out so that the switch to hourly billing benefits both client and lawyer.

The impulse to shift cost risk away from a risk-averse lawyer must always be tempered by the danger that the switch to the hourly contract may increase moral hazard; shifting risk from the risk-averse lawyer decreases risk cost but may increase the lawyer's incentive to be wasteful. Nonetheless, at some point as cost uncertainty increases, it will become worthwhile for the parties to switch to an hourly contract to reduce risk costs, even though the switch might increase moral hazard. If cost uncertainty becomes sufficiently large, then the hourly contract's benefits in risk distribution will outweigh the hourly contract's harms in creating moral hazard. Client and lawyer will both demand hourly billing.

In contrast, if the client is more risk averse than the lawyer, then an increase in cost uncertainty leaves the optimality of a fixed-fee contract unaltered. If the client is more risk averse, then a fixed-fee contract, such as a contingency agreement, already shifts risk to the person who bears risk most cheaply. Increases in risk make the choice of the fixed-fee contract even more beneficial, shifting the new risk away from the risk-averse client. If a lawyer and a risk-averse client were using a contingency agreement before the increase in cost uncertainty, then the increase in uncertainty will not cause a switch away from the contingency agreement. At the same time that an increase in cost uncertainty would tend to induce a change to hourly billing for relatively risk-neutral clients, the added uncertainty would leave the contingency agreements for risk-averse clients unchanged.

The model also explains the choice of contract in a variety of other contexts. For example, a homeowner may agree to an hourly contract for a teenager to mow the lawn and an architect to design a garage because the numbers of hours that each task will require are uncertain, because the teenager and architect are relatively risk averse, and because the homeowner's existing relationships with the teenager and architect suggest that they will not dawdle on the job to pad their bills. Concerns of risk aversion outweigh concerns of moral hazard.

b. Graphical Analysis

The influence on the optimal contract of the level of cost uncertainty can also be illustrated graphically. In figure 1, on the vertical axis is the net income or profit that the lawyer, before she starts work on a specific legal task such as litigating a case, expects to earn on the task. The net income or profit is the fee that the lawyer receives minus the costs that were necessary to earn the fee. These costs include expenses such as overhead costs for leasing an office, hiring a secretary or an associate, and buying paper for the copier.

FIGURE 1
EXPECTED PAYMENT, UNCERTAINTY, AND THE OPTIMAL CONTRACT
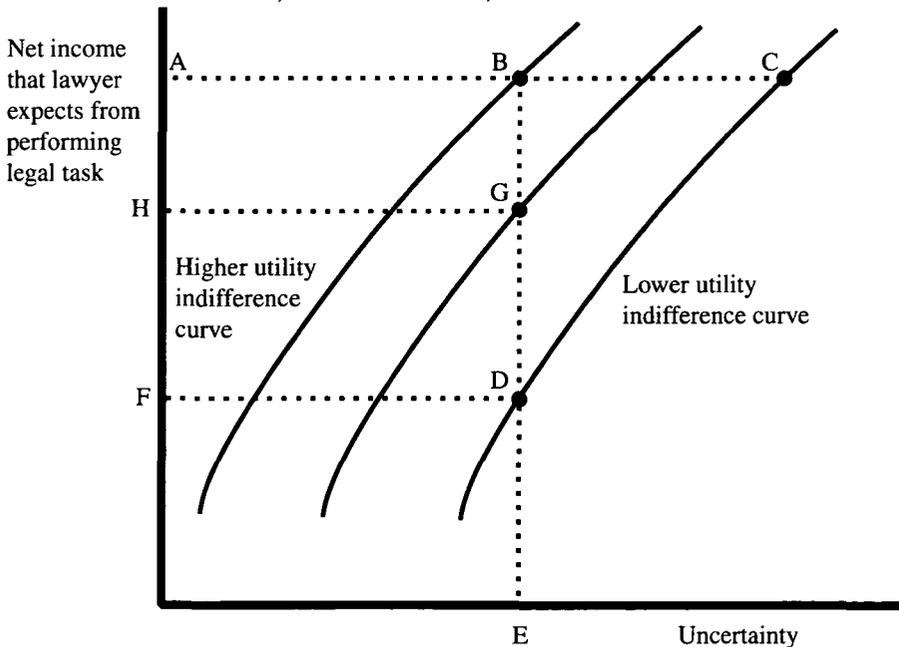
In addition, the lawyer's costs of conducting the task include the opportunity cost of the lawyer's time. For example, suppose that if the

lawyer had not worked ten hours for a litigation client, then the lawyer could have earned $150 per hour drafting wills. Then the lawyer's opportunity cost of the ten hours' work for the litigation client was $1500. This $1500 opportunity cost is just as real a cost as a $1500 cost for paper, office rent, or associates' salaries. By working ten hours for the litigation client, the lawyer spends $1500 just as if she had written a $1500 check for other costs.

The vertical axis indicates only the lawyer's expectation about the net income that she will receive from performing the task. Depending on the contractual arrangement with the client, the lawyer may actually receive more or less net income for the task than she expected.

A fixed-fee arrangement will create more uncertainty about the net income that the lawyer will receive than will an arrangement for payments by the hour. For example, if the lawyer works on the case under a fixed fee, then the lawyer's net income will be larger than expected if the case settles earlier than expected. The case will cost the attorney less than she expected, for costs such as for paper, for secretary and associate salaries, and for the opportunity cost of her own time, and the attorney will have more time than she expected to earn money on other cases.

Instead, suppose that the case requires fifty more hours to litigate than the lawyer had expected. This increases the costs of litigating the case, and the increase includes the opportunity cost of the fifty hours; the lawyer must now devote to the case fifty hours for which the lawyer or her associate could have earned income in other cases. The lawyer's net income for the project will be lower than the lawyer had expected because the lawyer's costs are higher than expected. If the lawyer could have earned $7500 for the fifty hours in other cases, then the unexpected fifty extra hours reduce the lawyer's net income in the case by $7500.

In contrast to the fixed-fee contract, an hourly contract will reduce the lawyer's income uncertainty. Suppose that the case requires fifty more hours to litigate than the lawyer had expected. Unlike the fixed-fee contract, which would have imposed upon the lawyer an unexpected loss, the hourly contract will compensate the lawyer fully for the case's unexpected additional costs. The hourly fee that the lawyer will receive for each of the fifty unexpected hours will, in a competitive market, cover all of the lawyer's costs, including the opportunity cost of the fifty hours of her time.[55] Just as a cost-plus procurement contract protects a defense contractor from the risk of unexpectedly high costs, an hourly contract protects the lawyer from the same risk.

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55. *See supra* text accompanying notes 31-32.

The lawyer need not unexpectedly sacrifice fifty hours of income, reducing profits from the case by an identical amount.[56]

The horizontal axis measures the level of the lawyer's uncertainty about how much net income she will eventually receive for performing the task. The further to the right, the greater the uncertainty. For example, at point B, the lawyer expects to earn a net income A for the task, and faces only a moderate possibility E that the amount will instead turn out to be more or less. In contrast, at point C, the lawyer's best guess at the net income that she will eventually earn on the task is A. However, at C, there is a greater uncertainty than at B about whether the amount will instead be larger or smaller.

If the lawyer is at all risk averse, then the lawyer will prefer a point in the figure's upper left corner, with a high expected net income and low risk. The lawyer will loathe the lower right corner, where the expected net income is low and risk is large.

The figure also contains three indifference curves, each of which indicates combinations of expected net income and uncertainty that make the lawyer equally happy. Each indicates that a lawyer will be willing to give up some expected income to reduce risk, and she will be willing to incur some additional risk if she expects to receive larger income. For example, on the right-most indifference curve, the lawyer is indifferent between points C and D. Point C has high expected income but high risk. At D, the expected income is lower, but D's lower uncertainty makes D equally as attractive as C. Each indifference curve's steep slope indicates that the lawyer is quite risk averse; the lawyer is willing to sacrifice much expected pay to reduce the uncertainty of that pay. The lawyer would prefer to be on an indifference curve as far as possible to the left. The farther an indifference curve is to the left, the happier that the lawyer is. The farther to the left, the more pleasing the combination of income and uncertainty is.

We can now examine the impact on the optimal contract of increased uncertainty. Assume that the client, but not the lawyer, is risk neutral: The client cares only about the expected amount of legal fees that she will have to pay, but she has no concern about how uncertain her expectation is. In the past thirty years, this assumption has been realistic for large, corporate clients.[57] Suppose that the lawyer and client are initially using a fixed-fee contract and are at point B. Because

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56. An hourly contract will not eliminate all of the lawyer's risk. The client may challenge or refuse to pay some of the lawyer's charges, as has become increasingly common, causing the lawyer not to receive compensation for some of the additional time. *See, e.g.*, Lisa Brennan, *Insurance Defense Lawyers Switch Fields in Droves*, FULTON COUNTY DAILY REP., May 19, 1998, at 1, 6. Nonetheless, the lawyer's net income for performing a given task is much more certain under an hourly contract than under a fixed-fee contract. Under a fixed-fee contract, the lawyer receives the same fixed fee, regardless of the number of hours that the task requires. In contrast, under an hourly contract, the lawyer receives some additional payment for devoting unexpected additional hours to the case, even if the client disputes some billing.

57. *See supra* text accompanying notes 35-36.

of the fixed-fee contract, some uncertainty exists about the net income that the lawyer will eventually receive; the lawyer is not sure exactly how many hours and other costs the case will require to litigate. However, this uncertainty is moderate; point B is not very far to the right. Suppose that the fixed-fee agreement is presently optimal. That is, although the agreement imposes some costly risk on the lawyer, the agreement reduces the cost of moral hazard; we assume that, although the fixed-fee agreement creates an incentive for the lawyer to shirk, the agreement eliminates the greater danger that an hourly contract would induce the lawyer to inflate her hours.

Assume then that a change occurs that increases uncertainty about the amount of time that cases take to litigate or that transactions take to negotiate. Although the expected number of hours remains the same, the variance increases so that the possibility rises that the actual number of hours will be higher or lower than the expected number of hours. That is, it becomes harder to make an accurate estimate of the number of hours that a task will demand. This change can be seen in figure 1 as a movement from B to C. Both before and after the change, the lawyer expects the fixed-fee contract to provide the lawyer with net income of A for working on the task. However, after cost uncertainty increases, the lawyer is less certain about the accuracy of her expectation. The increase in risk will make the lawyer worse off. Because the lawyer has the same expected income as before but greater uncertainty, the lawyer moves to an indifference curve to the right, which represents lower happiness.

The figure shows that a large increase in uncertainty will change the optimal contract from a fixed-fee contract to the hourly contract, which shifts more risk to the client; a change to a contractual arrangement that shifts risk from the risk-averse lawyer to the risk-neutral client will now benefit both lawyer and client.[58] For example, suppose that the client and lawyer are considering an hourly contract that would shift uncertainty to the client such that the lawyer would face a lower level E of risk. Before agreeing to this shifting of risk from the lawyer to the client, the client and lawyer would negotiate the hourly rate that the lawyer would receive. The figure demonstrates that the lawyer would be willing to accept any hourly rate that would produce an expected net income above level F. At point D, with an hourly rate that produces net income of F, the lawyer would be exactly as happy as she was under the previous fixed-fee contract at C, where the lawyer expected the fixed-fee contract to yield a higher income A, but with more uncertainty. The indifference curve shows that the lawyer would be as happy with the new contract's lower expected income and

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58. Because it benefits both lawyer and client, economists term the change "Pareto optimal." *See* NICHOLSON, *supra* note 32, at 526-27.

lower risk as she was with the fixed-fee contract's higher expected income but higher risk.

An hourly contract with risk level E and an hourly rate that produces net income somewhere between F and A will make both lawyer and client better off. Both will demand the shift to an hourly contract. For example, with a contract that point G represents, the client will be better off than with the original contract at point C. The client will expect to save money under the hourly contract; the client will expect to make hourly payments that will give the lawyer net income of H rather than the earlier fixed-fee contract's higher expected income of A. The hourly contract creates more risk for the client: Because of uncertainty about how many attorney hours the case will require to litigate, the client's total expense for the case could end up being larger or smaller than expected. However, because, as we have assumed, the client is risk neutral, the hourly contract's increased risk does not matter to the client; the client cares only about the case's expected litigation costs. The hourly contract will create some danger of moral hazard. But, if uncertainty becomes sufficiently large, then the savings from shifting to the hourly contract will more than compensate for the cost of the moral hazard.

Likewise, the contract that point G represents will make the lawyer better off. Figure 1 shows that point G is on an indifference curve that is to the left of the indifference curve that contained point C. The lawyer prefers point G's combination of low risk and moderate expected income to point C's higher risk and higher expected income.[59]

5. The Impact of the Level of Lawyer Disloyalty

The model indicates that the degree to which lawyers are willing to be disloyal to their clients will influence the choice of contract. Each contract type creates moral hazard: The fixed-fee contract creates an incentive for the lawyer to do too little work, and the hourly contract creates an incentive for too much work. However, it is not inevitable that lawyers will respond to the incentives and succumb to the moral hazard. For example, some lawyers under hourly contracts may ignore their selfish interest and not conduct excessive work.[60]

The more that lawyers are willing to be disloyal to their clients— that is, to succumb to moral hazard—the more that the choice of contract type will depend on reducing moral hazard, rather than distributing risk efficiently. Suppose that lawyers were always faithful to their clients' interests, regardless of the incentives that contracts create. Then the costs of moral hazard would be zero, regardless of which

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59. This section's graphical analysis assumes that the lawyer is more risk averse than the client. If the client is more risk averse, then the fixed-fee contract will remain optimal even after an increase in cost uncertainty. *See supra* Part II.D.4.a.

60. *See supra* text accompanying notes 49-50.

contract the lawyer and client chose. As Table 1 shows, the client and lawyer would choose a contract based entirely on efficient risk distribution. The only costs that would exist for the client and lawyer to consider would be the cost of risk bearing for each of the contract types.

In contrast, suppose that lawyers regularly ignored their duties to their clients, and instead they responded exclusively to the incentives for self-interest that their contracts created. The choice of contract type would then depend heavily not only on the risk-bearing costs of each contract type, but also on the costs of the moral hazard that each contract type created.

Influences on the level of lawyer disloyalty may include cultural factors. Some eras and some countries and cities may have traditions of relatively great honesty and loyalty. For example, several commentators recall a purported earlier golden age when lawyers in the United States were more loyal and trustworthy than today.[61]

Legal rules, institutions, and contractual arrangements may influence the degree to which lawyers with a given tendency to disloyalty will actually be disloyal. For example, certain contract types may constrain disloyalty by making it easier to detect and punish. An hourly contract might induce a lawyer with a given level of disloyalty to respond eagerly to selfish incentives, while the same lawyer would respond to the selfish incentives less aggressively under a fixed-fee contract.

This pattern of lawyer disloyalty would tend to cause fixed-fee contracts to be optimal. Costs of moral hazard would be larger for hourly contracts than for fixed-fee contracts. A large enough willingness to be disloyal under an hourly contract could cause the fixed-fee contract to remain optimal even if cost uncertainty increased. Even though a fixed-fee contract would impose larger risk costs, it would protect the client from the still larger costs from moral hazard under the hourly contract because of the lawyer's disloyalty.[62]

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61. *See* MARC GALANTER & THOMAS PALAY, TOURNAMENT OF LAWYERS 32-36 (1991); MARY ANN GLENDON, A NATION UNDER LAWYERS 17-39 (1994); ANTHONY T. KRONMAN, THE LOST LAWYER 291-92 (1993); Ross, *supra* note 2, at 5-6. Alternately, it might be that lawyers of any given era always tend to believe that the previous generation of lawyers was more moral. For example, during the 1930s—the supposed golden age—many lawyers proclaimed vigorously that moral standards had fallen precipitously compared to the previous generation. *See, e.g.*, George B. Shepherd & William G. Shepherd, *Scholarly Restraints? ABA Accreditation and Legal Education*, 19 CARDOZO L. REV. 2091, 2117-19 (1998).

62. Different procedural rules may also constrain disloyalty differently. For example, it could be that the introduction of discovery would induce additional disloyalty. Determining whether a lawyer has undertaken the correct amount of discovery might be difficult for the client to determine; for a given case, several different discovery approaches might be defensible, from little discovery to a lot. Because rules that allow broad discovery may give lawyers more unmonitorable discretion, it is conceivable that discovery's introduction might cause more shirking under fixed-fee contracts and more overbilling under hourly agreements.

III.   THE THEORY APPLIED: HOW DISCOVERY LED TO HOURLY BILLING

Applying our theoretical model's lessons, we now describe how the discovery provisions of the 1938 Federal Rules helped to cause the change from fixed-fee billing to hourly billing. The availability of discovery both created uncertainty about the time and effort that a case would require to litigate and reduced lawyers' incomes. Both the uncertainty and the reduced incomes helped to convince clients and lawyers to switch to hourly billing.

A.   Billing Practices Before the 1938 Discovery Provisions: Fixed-Fee Billing

Applying our theoretical model to empirical observation helps us to understand the nature of the optimal contract before the expansion of pretrial discovery in 1938. The model indicates that, if costs are relatively predictable, then the nature of the optimal contract will depend on the relative degree of danger that a fixed-fee contract will cause the lawyer to shirk compared to the degree of danger that an hourly contract will induce excessive work. Because predictable costs eliminate risk bearing as a concern, the client and lawyer will choose a contract based on the relative costs of moral hazard under each contract. If the expected cost of shirking under a fixed-fee contract is small compared to the expected cost of bill padding under an hourly contract, then the fixed-fee contract will be optimal.

In the years before the 1938 Federal Rules triggered wide-open discovery, litigation costs were relatively predictable.[63] Discovery had not yet introduced extreme cost uncertainty. During this period, hourly billing was infrequently used. Instead, attorneys used several other billing methods. Some attorneys used an imprecise billing system: Upon completion of a task for the client, the lawyer would calculate the bill based on a number of factors, including the difficulty of the task, the results achieved, the value to the client, and the lawyer's skill and reputation.[64] That system resembles the "value billing" approach that some now propose as a supposedly new alternative to hourly billing.[65]

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63.   See infra text accompanying notes 64-66.

64.   See Ross, supra note 2, at 14; see also DWIGHT G. McCARTY, LAW OFFICE MANAGEMENT 82-83 (1940) (listing six factors that a lawyer, after providing legal services, used in determining his or her bill); MICHAEL H. TROTTER, PROFIT AND THE PRACTICE OF LAW 28 (1997); Edmund Burke, Some Comments on Lawyers' Fees, in THE PRACTICAL LAWYER, THE PRACTICAL LAWYER'S LAW OFFICE MANUAL No. 2, 2, 5-6 (Paul A. Wolkin ed., 1959).

65.   Current proposals for value billing suggest that a lawyer should base his fee not only on the time spent, but also on "the novelty and difficulty of the questions involved, the nature of the relationship with the client, the amount involved and the results obtained, as well as the experience, reputations and skill of the lawyers who performed the work." G. Wynn Smith, Jr., Toward Value Billing, L. OFF. INFO. SYS., Nov./Dec. 1989, at 23, 24; see also Mary Ann Altman, A Perspective—From Value Billing to Time Billing and Back to Value Billing, in BEYOND THE BILLA-

However, most common was some form of fixed-fee billing, under which the client paid the lawyer a fixed fee that had been arranged in advance. As Robert Litan and Steven Salop note, "Before World War II, attorneys generally charged on a contingency or fixed fee basis, and few kept track of their time."[66]

We can deduce from the choice of this contract type the relative sizes of the danger of bill padding from an hourly contract and the danger of shirking from a fixed-fee contract. To do so, we must first examine the relative risk aversion of clients and lawyers during the period. As we have seen, institutional clients, especially corporations, tended to be relatively risk neutral.[67] Lawyers were usually more risk averse than their institutional clients, as distinct from their individual clients. A small law firm or lawyer in solo practice will be more risk averse than a large law firm.[68] Through the 1950s and 1960s, except for a few large firms that were mainly in New York City, lawyers practiced by themselves in solo practices or in small partnerships. In the late 1950s, only thirty-eight law firms in the United States had more than fifty lawyers. More than half of these were in New York City.[69] In Atlanta in 1960, the largest law firm had twenty-one lawyers; the next largest had sixteen.[70]

Because lawyers were generally more risk averse than their institutional clients, Table 1 suggests that optimal distribution of risk-bearing costs, if risk bearing were the only concern, would have led to representation of institutional clients under hourly contracts. Risk-bearing costs would have been reduced by using hourly contracts to shift the little risk that existed from risk-averse lawyers to risk-neutral clients. However, clients and lawyers instead chose fixed-fee contracts.

This suggests that bill padding from hourly contracts presented a greater danger than shirking from fixed-fee contracts. Clients and lawyers chose fixed-fee contracts that eliminated padding even though the fixed-fee contracts increased the risk costs. Although the hourly contract would have distributed risk more efficiently, it would have created additional moral hazard that would have swamped the reduction in risk costs. As a handbook on billing noted: "A regular retainer

BLE HOUR: AN ANTHOLOGY OF ALTERNATIVE BILLING METHODS 11, 13 (Richard C. Reed ed., 1989) [hereinafter BEYOND THE BILLABLE HOUR] (recommending that, in addition to depending on time spent, the bill should depend on "the importance of the matter to the client and his or her business; the consequences to the client of not resolving the matter to his or her benefit; the personality of the client; the number of persons involved; the ability of the client to pay; the effect that handling the matter will have on the firm's resources, reputation and other clients; and a myriad of similar issues").

66. Robert E. Litan & Steven C. Salop, *Reforming the Lawyer-Client Relationship Through Alternative Billing Methods*, 77 JUDICATURE 191, 191 (1994).

67. *See supra* text accompanying notes 35-36.

68. *See supra* text following note 36.

69. *See* Erwin O. Smigel, *The Impact of Recruitment on the Organization of the Large Law Firm*, 25 AM. SOC. REV. 56, 58 (1960).

70. *See* TROTTER, *supra* note 64, at 2.

gives a client the advantage of getting legal advice at the lowest cost. It also enables him to know in advance what his legal costs are."[71]

The fixed-fee billing that was common before the introduction of broad discovery took three forms. First, many lawyers and clients used fixed retainers: The client paid the lawyer a fixed fee per month or year regardless of the amount or nature of legal services that the client received during the period.[72] We will see that in the 1960s, fixed-fee billing began to yield to hourly billing. However, even in the early 1960s after the use of retainer billing had begun to decline, a contemporary commentator described the standard billing practices that had prevailed for many decades:

> [A] lawyer arranges his compensation on a monthly or yearly retainer from a client for whom he customarily does a continuing flow of routine legal work. Under this arrangement an amount would be agreed upon, in advance, as fair compensation for all work of the usual type for the given period . . . .[73]

Several other sources confirm that retainer contracts were pervasive even as recently as the 1960s. A 1964 book described standard billing practice: "Retainers for substantial legal services are a rather classic situation, and one in which most successful law firms find themselves involved quite regularly."[74] A 1961 survey by a county bar association in New York showed that four-fifths of the firms had fixed retainers with at least some of their clients.[75] Retainer billing was es-

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71. Eugene C. Gerhart, *The Art of Billing Clients, in* MANAGING THE LAW OFFICE 231, 246 (Daniel J. Cantor ed., 1964).

72. *See* COMPLETE GUIDE TO A PROFITABLE LAW PRACTICE 122-23 (Prentice Hall Editorial Staff eds., 1965) [hereinafter COMPLETE GUIDE] (contemporary account recommending "annual retainers for regular clients"); ROSS, *supra* note 2, at 14; *Retainers—A Symposium, supra* note 28, at 257; J. Adrian Rosenburg, *Lawyers' Fees and Charges,* MICH. ST. B.J., Apr. 1955, at 16, 19. A large amount of published information about attorneys' billing practices appeared in the late 1950s and early 1960s, in response to lawyers' concerns about their lagging incomes. *See, e.g.,* F. B. MACKINNON, CONTINGENT FEES FOR LEGAL SERVICES 17 (1964) ("As more attention has been directed toward the economics of law practice and alternative methods for financing legal services, the bar has become aware of the need for more information about itself. Surveys now underway or recently completed are beginning to meet that need."). *See generally* COMPLETE GUIDE, *supra*; MANAGING THE LAW OFFICE, *supra* note 71; THE PRACTICAL LAWYER, *supra* note 64.

73. MACKINNON, *supra* note 72, at 20. Most of the useful information on billing practices comes from the late 1950s and early 1960s, when bar associations began to study billing practices in order to find ways both to increase lawyers' incomes and to decrease the uncertainty that they faced. Thus, we are sometimes forced to use these later accounts to understand the prevalence of fixed-fee billing before 1938. By the time of these later accounts in the late 1950s and 1960s, fixed-fee billing had already begun to yield to hourly billing. *See infra* Part III.E. Thus, a 1964 source's indication that fixed-fee billing was then prevalent suggests that fixed-fee billing was even more prevalent in 1938, before the decline in fixed-fee billing; the prevalence of fixed-fee billing in 1938 was at least as great as the prevalence in the late 1950s and 1960s that these sources describe. *See, e.g.,* Gerhart, *supra* note 71, at 246; *infra* Part III.E.

74. *Retainers—A Symposium, supra* note 28, at 257 (comments of Harding A. Orren).

75. *See id.* at 259 (comments of Eugene C. Gerhart); The Broome County, New York, Bar Association, *A Local Survey of Law Office Economics,* 2 L. OFF. ECON. & MGMT. 101, 109 (1961).

pecially prevalent in representation of large corporations.[76] During the period, many books and articles recommended retainer billing.[77] A typical article argued: "Retainers are very desirable. They benefit the client and the lawyer."[78] Another book urged: *"Encourage regular clients to arrange definite retainers*. Clients who have paid a retainer will feel free to seek advice more often, especially as to small matters."[79]

Often the monthly or yearly retainer fee covered all legal services, including any trial work that the client might require.[80] At minimum, the retainer covered all legal work except for trials. For example, even in 1964, after changing economic conditions had begun to cause retainers to be replaced by hourly billing, a senior partner at a New York law firm commented:

> There are basically two types of retainers that we have in our office. One is a retainer under which we do all of the client's legal work, including the client's trial work, for a fixed fee. Such retainers are normally paid monthly and cover all of the legal services specifically referred to in the retainer agreement.
>
> The second type of retainer that we have is one which covers the usual routine of legal work and excludes from the retainer trial work and work before administrative agencies such as the Securities and Exchange Commission, ICC, Public Service and Public Utilities Commissions, Internal Revenue Service, etc. These items are separately billed, usually on a time basis, taking into account, of course, the results obtained.[81]

The lawyer and client, based on their experience under a given year's retainer, would negotiate to adjust the next year's retainer up or down as appropriate.[82]

The second common form of fixed-fee billing was task-based billing. The lawyer and client would agree in advance on the amount that

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76. *See* THERON G. STRONG, LANDMARKS OF A LAWYER'S LIFETIME 378 (1914), *quoted in* GALANTER & PALAY, *supra* note 61, at 16 (stating that, in the prediscovery world, there was "keen competition which exists in the profession, placing the lawyer in the attitude of reaching out for retainers.").

77. *See* MACKINNON, *supra* note 72, at 20; *see also* COMPLETE GUIDE, *supra* note 72, at 122-23 (contemporary account recommending "annual retainers for regular clients"); Herman S. Merrell, *Increasing Lawyers' Income, in* THE PRACTICAL LAWYER, *supra* note 64, at 15; Rosenburg, *supra* note 72, at 19.

78. Robert C. Abel, Jr., *How to Collect a Proper Fee,* 5 L. OFF. ECON. & MGMT. 415, 417 (1965).

79. Merrell, *supra* note 77, at 15 (emphasis in original).

80. *See Retainers—A Symposium, supra* note 28, at 252, 258-59.

81. *Id.* at 258-59 (comments of Eugene C. Gerhart). That the amount for the separately billed items would be adjusted "of course, [for] the results obtained" mirrors current proposals for value billing. *See supra* note 65 and accompanying text.

82. *See* COMPLETE GUIDE, *supra* note 72, at 123 ("Retainers are worked out once a year with our retainer clients. At the end of a year, if we feel we have done too much work for our retainers, we go over the work we have done and request a larger retainer in a succeeding year."); *see also* Abel, *supra* note 78, at 417; Merrell, *supra* note 77, at 15; *Retainers—A Symposium, supra* note 28, at 257.

the lawyer would receive for the task that the lawyer would perform.[83] A contemporary commentator noted, "Standard practice is for a fee to be set for each individual matter or case involving legal services."[84] In contrast to retainer billing, under which the client paid a fixed fee per month or year regardless of the tasks that the lawyer performed, under task-based billing, the client paid a fixed fee per task. Such task-based fixed fees were used even for substantial litigation matters. A firm that excluded certain matters from yearly retainers might charge fixed fees for each of the excluded matters. Even though a task-based fixed fee covered only a single task, task-based fees were sometimes called "retainers," just like the retainer fees that covered all of the client's legal services for a period. For example, a partner at a New York law firm explained, "We use certain retainer agreements in negligence cases and other litigation."[85] He continued that the cases for which retainers were used included "important cases such as large negligence claims or condemnation proceedings."[86]

The third variant of the fixed-fee contract was contingency billing, which was frequently used in representation of individual plaintiffs in personal injury actions.[87] One explanation for the use of contingent fees is that they permitted lawyers to represent plaintiffs who lacked sufficient means to pay for legal fees in advance of receiving a favorable judgment at the end of a case. They permitted a lawyer, in effect, to loan attorney's fees to an individual client who otherwise could not afford to litigate.[88]

Our model provides an additional explanation. We have seen that the fixed-fee contract was optimal for representation of institutional clients even though the contract distributed risk inefficiently. Although the fixed-fee contract shifted risk to the relatively risk-averse lawyer, it eliminated the moral hazard that the hourly contract would have created. The contingency contract was even more efficient. Like the fixed-fee contract for institutional clients, the contingency contract eliminated the lawyer's incentive to pad bills. In addition, the contingency contract distributed risk efficiently. Unlike institutional clients, which are relatively risk neutral, individual clients

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83.   See Ross, supra note 2, at 13-14.

84.   MacKinnon, supra note 72, at 20.

85.   Retainers—A Symposium, supra note 28, at 252 (comments of Eugene C. Gerhart).

86.   Id. A billing handbook of the time directly implies that fixed fees were used for litigation matters, with the only issue to negotiate being whether the fixed fee covered the litigation only through judgment, or also through collection:
A letter of retainer of fee contract should be entered into whenever possible (which means in almost every situation). The agreement should provide . . . [a] thorough definition of what service is to be performed and in some instances, what is not included (for example, in litigation, is the fee for judgment or collection and does it include or exclude appeals?).
Abel, supra note 78, at 416.

87.   The ABA had reluctantly permitted the use of contingent fees in 1908. See MacKinnon, supra note 72, at 8-17; Ross, supra note 2, at 14.

88.   See Posner, supra note 35, at 624; Ross, supra note 2, at 14.

are often more risk averse than the law firms that represent them.[89] The contingency contract not only reduced moral hazard, but it also shifted risk efficiently from the risk-averse client to her less risk-averse lawyer.

A common basis for determining the fixed fee that the lawyer would charge under task-based billing was the bar association fee schedule.[90] A bar association, at the state, county, or local level, would publish a list of various legal tasks along with fee minimums for each task. The history in the United States of using fee schedules extends back to the colonial period.[91] For example, a New York fee schedule from 1813 prescribed the fixed fees that a lawyer would charge for conducting a trial ($1.50) and arguing an appeal ($3.75).[92] The use of fee schedules ceased only in 1975 when the Supreme Court held that the schedules violated the antitrust laws.[93]

During the years just before the turn to hourly billing, approximately one-third of lawyers relied on fee schedules as their primary billing method.[94] The typical fee schedule's list of tasks and prices would be long and would include not only simple matters, but also matters that would require many meetings with clients, extensive drafting of papers, and court hearings.[95] For example, fee schedules from various counties in New York quoted fixed prices for hundreds of tasks such as an uncontested divorce; a contested divorce; an uncontested bankruptcy; a contested bankruptcy; a trial; a simple will; and a will with a trust provision.[96] Likewise, the fee schedule of the Illinois State Bar Association listed a fixed fee of $250 for an uncon-

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89. *See supra* text accompanying notes 35-36.

90. In 1972, a senior partner at a Philadelphia law firm reviewed his long career and noted that he had not used hourly billing: "Instead, most of us started, continued and yes, even concluded our legal careers by quoting set fees in advance, by following antiquated fee schedules or by estimating what we honestly felt to be a fair fee for the legal services we rendered." Mitchell W. Miller, *A Systematic Approach to Time Control*, in LAW OFFICE EFFICIENCY 157, 157 (American Bar Ass'n ed., 1972); *see also* RICHARD L. ABEL, AMERICAN LAWYERS 118 (1989); ROSS, *supra* note 2, at 14-16. The use of fee schedules increased markedly during the Great Depression as a cartel-like way to enlarge lawyers' incomes. *See* ABEL, *supra*, at 118; *see also infra* Part III.D.4.

91. *See* ROSS, *supra* note 2, at 11.

92. *See id.* Because of inflation, in today's dollars, the value of these fees would be much greater.

93. *See* Goldfarb v. Virginia State Bar, 421 U.S. 773, 792-93 (1975).

94. *See* Robert I. Weil, *Economic Facts for Lawyers*, 4 L. OFF. ECON. & MGMT. 405, 405 (1964); Robert I. Weil, *The Status of Fee Schedules in New York State*, N.Y. ST. B.J., Aug. 1963, at 309, 309, *cited in* ROSS, *supra* note 2, at 15.

95. *See* MACKINNON, *supra* note 72, at 13 ("Actually, a considerable proportion of the American lawyer's fees is set according to a schedule as in the case of the English solicitor; for example, fees for probate, real estate, and trust work are usually set by a standard scale. These schedules are frequently determined by custom or a local bar association rather than by statute or rule of court."). For a list of articles that describe the structure and pervasiveness of fee schedules, see ROSS, *supra* note 2, at 14 n.51.

96. *See* John E. Berry, *Minimum Fee Schedules—A Study*, 1953 N.Y. ST. B. BULL. 130, 131-35 (listing tasks and prices of long-standing fee schedules); *see also* ROSS, *supra* note 2, at 14-15.

tested adoption and $300 for a contested adoption.[97] The schedule indicated that the fixed fee would cover the following services: initial conference and interview with adopting parents, drafting of necessary documents, second conference with adopting parents, conference with persons consenting to the adoption, filing documents with clerk, conference with court's hearing officer, third conference with adopting parents, appearance at two court hearings, and preparation of various decrees, judgments, and certificates.[98]

Some lawyers used the fee schedules only grudgingly, but used them nonetheless. As a law-practice manual noted, "[T]hese lawyers compare a fee schedule to a menu in a restaurant or a price list in a meat market—and they deem it eminently improper that a client be able to ascertain the cost of a divorce in much the same way as he can the cost of chopped meat."[99]

B.   Discovery and the Increase in Cost Uncertainty

The new provisions for wide-open discovery in the 1938 Federal Rules created opportunities and incentives. First, the new rules greatly expanded litigants' opportunities to obtain information from their adversaries.[100] Second, the new rules created an incentive for lawyers to use discovery not only to obtain useful information, but also to gain tactical advantage by imposing on their adversaries large discovery costs; conducting discovery was expensive, both for the party who sought discovery and for the party who responded to the discovery request.[101]

As lawyers exploited the opportunities that the discovery rules offered, the discovery process transformed the practice of law. Maurice Rosenberg, one of the leading experts on the Federal Rules and litigation procedure, has noted, "No change in litigation practice resulting from the Rules has had as great an impact as the liberalization of pretrial discovery."[102] Although some cases had little discovery, in a substantial fraction of cases, the use of discovery quickly exploded, and, as Rosenberg has noted, discovery "expanded from a useful tool to a combination lawyer's industry and litigator's religion."[103] Before 1938, lawyers who conducted lawsuits were called trial lawyers. After the growth of discovery shifted the focus from trial to engorged pretrial proceedings, trial lawyers began to be called litigators.[104] For

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97.   *See* COMPLETE GUIDE, *supra* note 72, at 125-26.
98.   *See id.*
99.   *Id.* at 127.
100.   *See* FED. R. CIV. P. 26-37; *see also supra* note 4.
101.   *See* George B. Shepherd, A Theoretical Model of the Pretrial Litigation Process and Discovery (1998) (unpublished manuscript, on file with the author).
102.   Maurice Rosenberg, *Federal Rules of Civil Procedure in Action: Assessing Their Impact*, 137 U. PA. L. REV. 2197, 2203 (1989).
103.   *Id.*
104.   *See id.*

most, "trial lawyer" was no longer an accurate title. Even in the small minority of cases in which trials occurred,[105] the trials were now often preceded by long periods of intense pretrial maneuvering. The law- yer's main task was no longer conducting trials. Instead, the lawyer now focused on pretrial practice, such as filing pretrial motions and conducting discovery.

Because more litigation occurs in state courts than in federal courts,[106] discovery's impact on the profession was magnified as state after state copied the Federal Rules in the decades after 1938. Several states acted quickly; by 1948, four states had adopted discovery provi- sions that mirrored the Federal Rules.[107] Eleven more states had fol- lowed the Federal Rules by the early 1960s.[108] Between 1960 and 1975, thirteen additional states joined the parade.[109] By the mid-1970s, thirty-two states had discovery rules that mirrored the Federal Rules.[110] Several additional states joined more recently.[111] By the mid-1980s, thirty-six states allowed broad federal-style discovery.[112]

In addition, broad discovery's impact on the profession grew greater as lawyers gradually began to adjust their professional behav- ior to the new discovery environment. Even after a jurisdiction adopted wide-open discovery, it could take years for lawyers to learn to exploit fully the opportunities that discovery offered both to obtain information and to seek strategic advantage.

The new wide-open discovery substantially increased cost uncer- tainty. After broad discovery was introduced, a lawyer was much less certain about the time and expense that a case would require to liti- gate. Although discovery caused litigation costs to increase greatly in some cases, it caused little increase in others. Large average discovery costs hid wide variation in discovery costs in individual cases. A sur- vey in 1951 noted many complaints "[t]hat discovery is expensive and time consuming."[113] However, the survey also noted the wide varia- tion in discovery amounts. Some cases had voluminous discovery, but some had little.[114] Indeed, both this 1951 survey and another survey from the same year noted that no discovery occurred in more than

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105. *See* WILLIAM A. GLASER, PRETRIAL DISCOVERY AND THE ADVERSARY SYSTEM 97-98 (1968).
106. *See, e.g.,* Marc Galanter, *News from Nowhere: The Debased Debate on Civil Justice,* 71 DENV. U. L. REV. 77, 92 (1993).
107. *See* John B. Oakley & Arthur F. Coon, *The Federal Rules in State Courts: A Survey of State Court Systems of Civil Procedure,* 61 WASH. L. REV. 1367, 1378-1433 (1986) (discussing states' adoption of rules that resembled Federal Rules of Civil Procedure, including discovery provisions).
108. *See id.* at 1434.
109. *See id.*
110. *See id.* at 1428.
111. *See id.* at 1434.
112. *See id.* at 1428.
113. Speck, *supra* note 13, at 1132.
114. *See id.*

half of the cases filed.[115] Likewise, a survey of discovery costs in the early 1960s showed that average discovery expense was substantial.[116] However, the variation among individual cases was broad. Again, some cases had no discovery, in others it was moderate, and in some it was substantial.[117] A decade later, surveys continued to show that no discovery occurred in more than half of cases, and that, in cases with discovery, the amount of discovery varied widely.[118]

Thus, at the beginning of a case, it was difficult to determine which cases would generate much discovery work and which cases would generate little or none. At the beginning of a case, the attorneys had only a vague idea of how much discovery would occur in that case. A litigant would know in a general way that several factors tend to influence a case's discovery amount. For example, research has shown that cases with large stakes or many factual issues tend generally to yield more discovery, while small cases with few factual disagreements generally tend to yield less discovery.[119] However, even after considering these predictive factors, substantial uncertainty still remained. Sophisticated statistical models suggest that, even after accounting for many possible influences on the amount of discovery in a particular case, great uncertainty still existed about that amount.[120] Likewise, a report of a 1963 survey on discovery noted that cases with certain characteristics would tend generally to have large amounts of discovery. However, even after accounting for these characteristics, the survey concluded, "The range in costs is very great in these suits."[121]

A major reason for the unpredictability of a litigant's discovery costs was that the costs depended not only on the litigant's own discovery behavior, but also on the adversary's conduct. The litigant would need to devote time and expense to respond to each of the

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115. *See id.* at 1134; Symposium, *The Practical Operation of Federal Discovery*, 12 F.R.D. 131, 133 (1952).

116. *See* GLASER, *supra* note 105, at 179.

117. *See id.* at 164-66, tbl.38.

118. *See* PAUL R. CONNOLLY ET AL., JUDICIAL CONTROLS IN THE CIVIL LITIGATIVE PROCESS: DISCOVERY 28-29 (1978), *microformed on* Sup. Docs. No. JU 13.10:78-4 (U.S. Gov't Printing Office); *see also* Jeffrey J. Mayer, *Prescribing Cooperation: The Mandatory Pretrial Disclosure Requirement of Proposed Rules 26 and 37 of the Federal Rules of Civil Procedure*, 12 REV. LITIG. 77, 87-88 n.19 (1992); Linda S. Mullenix, *Discovery in Disarray: The Pervasive Myth of Pervasive Discovery Abuse and the Consequences for Unfounded Rulemaking*, 46 STAN. L. REV. 1393, 1434-35, 1441-42 (1994).

119. *See* GLASER, *supra* note 105, at 55-59, 162-81; George B. Shepherd, *An Empirical Study of the Economics of Pretrial Discovery*, INT'L REV. L. & ECON. (forthcoming 1999) (manuscript at 14-24, on file with the author).

120. Using data from a detailed survey of discovery in 1963, a study created a statistical model that accounted both for 15 possible influences on a case's discovery amount and for the possible interaction between the litigants' discovery amounts. Although the influences that were explored accounted for some of the variation in cases' discovery amounts, a substantial amount of variation remained. *See* Shepherd, *supra* note 119, at tbl.2.

121. GLASER, *supra* note 105, at 176-77. These characteristics include, among others, the existence of patent claims and antitrust claims. *See id.*

adversary's discovery requests. More interrogatories from the adversary would require the litigant to incur greater expense to respond to them. Litigants did not limit their responses to answering the adversary's questions and requests. An empirical study of discovery behavior in 1963 indicates that, in many cases, a litigant would respond to the adversary's discovery in kind. If the adversary served fifty-three discovery requests on the litigant, then the litigant would tend to serve fifty-three discovery requests on the adversary.[122] The additional discovery requests that the litigant served also would require time and expense to draft, and they would impose additional costs on the adversary.

The adversary's behavior was highly unpredictable. Since 1938, commentators have noted that, in some cases, the litigants' discovery behavior is responsible and predictable. However, in a large number of other cases, at least one litigant conducts abusive or excessive discovery.[123] For example, a 1963 study concluded that, in approximately half of the cases, litigants would conduct the amount of discovery that their adversaries expected.[124] However, in the other half of cases, litigants perceived that their adversaries had conducted unnecessary discovery and had embarked on "fishing expeditions."[125] In approximately 15% of the cases, the litigant believed that the adversary used discovery not merely to fish for facts, but also to harass the litigant.[126] A 1951 study found that discovery abuse existed, but its prevalence was uncertain: "Lawyers agreed that discovery devices are used in some cases to harass the other side into a settlement—'to create an atmosphere for settlement' as one phrased it—but they were unable to estimate the extent of this abuse."[127]

The dependence of the litigant's total discovery expense on the adversary's behavior created uncertainty. The litigant's discovery expense was determined to a great extent not by the litigant, but by the uncontrollable, unpredictable behavior of the litigant's adversary.

C. Discovery Causes Lawyers' Incomes to Decline

In addition to increasing cost uncertainty, the introduction of wide-open discovery increased the average level of litigation costs. As this section will show, on average, litigating a case now consumed

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122. *See* Shepherd, *supra* note 119, at 22.

123. For a list of many commentators who, in every period since 1938, have described the discovery abuse that occurs in some cases, see Charles W. Sorenson, Jr., *Disclosure Under Federal Rule of Civil Procedure 26(a)—"Much Ado About Nothing?"*, 46 HASTINGS L.J. 679, 701 n.76 (1995).

124. *See* GLASER, *supra* note 105, at 118-19, tbl.29.

125. *See id.*

126. *See id.*

127. Speck, *supra* note 13, at 1152.

more lawyer time and became more expensive. In a world in which fixed fees remained static, this led to a decline in lawyers' incomes.

The introduction of broad discovery in federal and state litigation caused litigation costs to grow quickly. Discovery costs soon began to consume more than one-third of the average case's litigation costs.[128] In the decade after 1938, testimony before Congress and a cascade of articles criticized the new discovery rules.[129] Among other concerns, a frequent complaint was discovery's great expense. For example, in 1951, an official for the federal courts wrote: "Today, after thirteen years of experience under liberal discovery rules, complaints are heard. It is said: (1) That discovery is expensive and time consuming out of proportion to benefits; that depositions last weeks, interrogatories and admissions cover thousands of items, and motions to produce call for tons of documents."[130] Similarly, the report from an extensive 1954 investigation concluded:

[T]he average practitioner, in addition to being saddled with such overhead expenses as rising costs of office rents and clerical help, must cope with increased court costs, filing fees and lengthy pretrial examinations . . . which are generally required in all negligence actions, regardless of the nature of the injury or the amount of the probable recovery.[131]

Likewise, a 1957 article in the *A.B.A. Journal* on the new pretrial discovery rules noted, "Even though the Rules specifically provide protective measures against abuse, embarrassment and undue annoyance, nevertheless not only our own observations but the reported cases demonstrate the terrific time, expense and effort which can be, and are to a significant extent, the results of the procedure outlined in these Rules."[132]

Cost increases that resulted from wide-open discovery were not limited to increases in pretrial costs. In addition, discovery both reduced the frequency of settlement and caused trial costs other than discovery to increase.[133] The drafters of the Federal Rules had predicted that, although discovery would impose some additional cost

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128. *See* GLASER, *supra* note 105, at 179.

129. For a list of some of the early articles that criticized discovery, see Speck, *supra* note 13, at 1133 n.3.

130. *Id.* at 1132. Another survey described lawyers' common complaints about discovery, one of which was, "Litigation is more expensive and takes more time than formerly, because of the great amount of work and documentation introduced by discovery." GLASER, *supra* note 105, at 36.

131. Louis P. Contiguglia & Cornelius E. Sorapure, Jr., Note, *Lawyer's Tightrope—Use and Abuse of Fees*, 41 CORNELL L.Q. 683, 701 (1956).

132. Clyde A. Armstrong, *The Use of Pretrial and Discovery Rules: Expedition and Economy in Federal Civil Cases*, 43 A.B.A. J. 693, 694 (1957).

133. *See* GLASER, *supra* note 105, at 97-98, 101, 107; *see also* Rosenberg, *supra* note 102, at 2204; Speck, *supra* note 13, at 1152, 1155; Symposium, *Changes Ahead in Federal Pretrial Discovery*, 45 F.R.D. 479, 489 (1968). For a review of various empirical studies, see Sorenson, *supra* note 123, at 706-10.

before trial, total costs would decline because discovery would cause more cases to settle.[134] The prediction was wrong. Studies demonstrated that discovery did not produce a higher proportion of settlements than would occur without discovery. Instead, at the same time that discovery increased pretrial costs, it *decreased* the settlement rate, caused trials to become *longer*, and failed to reduce surprise at trial.[135] Scholars have developed various theories about why discovery deters settlement, including the explanation that discovery appears to create more disagreements than it resolves.[136]

Whatever the reasons, the bar recognized that discovery caused total litigation costs to increase. The following conclusion from a 1951 ABA survey was typical:

Discovery does not appear to have been successful in speeding the disposition of cases, for instead the courts seem to have taken over a larger share of the burden of investigation. A comparison between cases with and without discovery in Chicago and Maryland disclosed that discovery is associated both with the cases which take longer to dispose of and with cases which more often go to trial.[137]

Likewise, a lawyer from Indiana compared practice in federal court with practice in state court, where discovery was prohibited, and noted, "Our office files for federal cases are from two to three times as thick as those for comparable cases in state courts."[138] Addressing the problems "of the tremendous expense, effort and time which can be required of parties involved in litigation," a law firm partner from Pittsburgh wrote in the *A.B.A. Journal* in 1957 that "it seems clearly evident that in many respects the procedure provided for in the Rules has aggravated rather than alleviated them."[139] A decade later, a survey indicated that the majority of attorneys believed that discovery increased the costs of litigation.[140]

The increase in total litigation costs from the discovery rules in turn contributed to a substantial decline in lawyers' incomes. Our eco-

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134. *See* GLASER, *supra* note 105, at 9-12; Rosenberg, *supra* note 102, at 2204-05.

135. *See* sources cited *supra* note 133.

136. A survey of discovery practice concluded, "Discovery gives the attacking party more confidence in raising his price for a settlement, but this often has the unintended effect of carrying the case closer to trial." GLASER, *supra* note 105, at 97. Glaser concluded that discovery leads to new disagreements between the litigants, rather than resolving disagreements. *See id.* at 91-101. *See also generally* Samuel Issacharoff & George Loewenstein, *Unintended Consequences of Mandatory Disclosure*, 73 TEX. L. REV. 753 (discovery increases pretrial expense; psychological studies indicate that people decline to settle after they have incurred great expense); Rosenberg, *supra* note 102, at 2204 (discovery raises more new factual issues than it resolves); Shepherd, *supra* note 101 (the discovery rules establish incentives that induce a litigation arms race and deter settlement).

137. Speck, *supra* note 13, at 1155.

138. GLASER, *supra* note 105, at 162.

139. Armstrong, *supra* note 132, at 695.

140. *See* GLASER, *supra* note 105, at 177-78.

nomic model again helps to explain why this occurred. The model offers three predictions about the specific impacts of an increase in discovery costs on lawyers' incomes, and historical experience comports with each of the predictions.

First, the model suggests that, at least for a short period, increasing discovery costs might reduce litigators' incomes. In the long run, the market for litigation services would reach an equilibrium in which the fees for litigating a case would rise to cover the new costs from discovery; until fees rose sufficiently, the supply of lawyers would decline as lawyers switched to more lucrative fields. However, in the short run, price stickiness—an inability of prices to change quickly in response to changed market conditions—might exist that would prevent prices from rising immediately to cover discovery's new costs. Because a lawyer's net income is his gross income minus his costs, increased costs from wide-open discovery would reduce net income for litigators who received fixed fees as long as price stickiness prevented increases in the fixed fees that matched the cost increases. For the two decades after 1938, most litigators continued to receive payment on a fixed-fee basis; they received a fixed retainer per month or year, a fee per task, or a contingency fee.[141] As litigators' costs increased because of discovery, a static fixed fee provided less net income than before. Even if the fixed fees increased to some extent over time, litigators' net incomes would fall if the fee increases lagged behind the swiftly increasing time and effort that expanded discovery required.

Second, our economic model predicts that the introduction of broad discovery would, during a period of price stickiness, cause incomes to fall more sharply for lawyers than for nonlawyers.

Third, because discovery would increase costs only for litigators, we would expect sharper declines in income for litigators than for transactional lawyers. However, many transactional lawyers would not be immune from discovery's income-depressing effects. Expanded discovery would have reduced the incomes neither of lawyers in firms that conducted no litigation nor of solo transactional lawyers. However, the new discovery costs would reduce incomes for transactional lawyers in firms that conducted both litigation and transactional work. Because such a firm's partners draw their incomes from a common pool that fills based on the costs and revenues from both transactional lawyers and litigators, the incomes of all of the firm's partners, both transactional lawyers and litigators, depend on the costs and receipts of each lawyer in the firm, including the litigators. Although discovery would depress incomes for both litigation partners and transactional partners, litigators' incomes would fall farther. Firms would tend to

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141. *See supra* Part III.A.

provide larger draws to the transactional lawyers, who produced greater profits than did the litigators.

The history of lawyers' incomes in the years that followed the introduction of broad discovery confirms each of the three theoretical expectations: Price stickiness caused lawyers' incomes to fall, in both real terms and relative to other professions, in the years that followed the introduction of broad discovery, and the fall was greatest for litigators. For the two decades after 1938, lawyers' income fell in real terms.[142] A lawyer grimly noted in 1959 that, because the inflation rate exceeded the rate of increase of lawyers' incomes, the period after the adoption of the Federal Rules was an economic disaster for the legal profession, "leaving the average lawyer without the benefits of the rising standard of living enjoyed by the public generally."[143]

In the years after 1938, not only did lawyers' earnings fall in real terms, but lawyers' incomes also lagged behind incomes in other professions. Lawyers were excluded from the sharply rising incomes that postwar prosperity brought to almost every other employed person in the U.S. economy.[144] This is consistent with our theory that the causes of the decline in lawyers' income were those, like discovery, that were specific to the legal profession, rather than those causes that affected the entire economy. At the same time that discovery reduced incomes for lawyers substantially, incomes rose substantially in most other professions and industries in which increased discovery costs had no direct impact.

The decline in lawyers' income especially galled lawyers because the decline happened at the same time that salaries were increasing quickly for doctors and dentists.[145] Until 1940, the average income for lawyers exceeded the average income for doctors.[146] However, beginning in 1940, two years after broad discovery was introduced in the federal system, doctors' incomes surged ahead, and, in the following years, lawyers' incomes fell ever further behind.[147] By 1951, doctors' average incomes were 50% higher than lawyers' incomes.[148]

In an increasingly persistent flow of articles, a worried legal profession began to complain in the late 1950s about "[l]awyers' increas-

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142. *See* Ross, *supra* note 2, at 16 & n.62; SPECIAL COMM. ON ECON. OF LAW PRACTICE FOR THE AM. BAR ASS'N, THE 1958 LAWYER AND HIS 1938 DOLLAR 5 (1958) [hereinafter THE 1958 LAWYER]; Arch M. Cantrall, *Economic Inventory of the Legal Profession: Lawyers Can Take Lessons from Doctors*, 38 A.B.A. J. 196, 196-99 (1952); Contiguglia & Sorapure, *supra* note 131, at 684; Merrell, *supra* note 77, at 9; S. Herbert Unterberger, *Comment on "The Economic Dilemma of the American Lawyer"*, L. OFF. ECON. & MGMT., Aug. 1960, at 40, 40.
143. Merrell, *supra* note 77, at 9.
144. *See* sources cited *supra* note 142.
145. *See* Ross, *supra* note 2, at 16; THE 1958 LAWYER, *supra* note 142, at 5; Gerhart, *supra* note 71, at 232-33; Lee Loevinger, *Professional Income: Why Doctors Make More Money Than Lawyers*, 44 A.B.A. J. 615, 615-18 (1958); Merrell, *supra* note 77, at 8-9.
146. *See* Gerhart, *supra* note 71, at 232.
147. *See id.*; *see also* Berry, *supra* note 96, at 130.
148. *See* Gerhart, *supra* note 71, at 232.

ing economic problems,"[149] about "the relatively unfavorable economic position of the legal profession today,"[150] and about "the decline in the comparative economic position of the lawyer in society during the past twenty-five years."[151] A pamphlet that the ABA distributed in 1958 to all of its members rang typically envious alarm bells about the falling salaries of lawyers and rising salaries of doctors:

> The percentage of the national income spent for legal service has dwindled to about one-third of what it was 25 years ago, in spite of the increased complexities of business and taxation. Do you know that the national average income of self-employed persons (excluding farmers) rose 144 percent during that period? Incomes of dentists rose 83 percent. Our colleagues in the medical profession have enjoyed a steep climb in net earning of 157 percent. Yet during that same period the income of lawyers in private practice has risen a mere 58 percent.[152]

Note that these percentage figures were not adjusted for inflation. In real terms, lawyers' incomes fell.

An article in the *A.B.A. Journal* in 1952 was titled *Economic Inventory of the Legal Profession: Lawyers Can Take Lesson from Doctors*.[153] In 1958, the *A.B.A. Journal* continued the theme with its article *Professional Income: Why Doctors Make More Money Than Lawyers*.[154] Soon after that, an expert on law-firm economics wrote:

> Recent surveys have shown very plainly that the conscientious hardworking lawyer of today is not being paid commensurate with his ability and the results that he attains. The doctors make more money than the lawyers. The business world pays much larger returns and offers better inducement for successful advancement.[155]

As economics would predict, the decline in lawyers' income caused a steep decline in the number of people who sought to become lawyers. From 1949 to 1959, the number of law students declined by 25%, while the country's population grew by 20%.[156] As a result, the number of law students per capita dropped by 49%.[157]

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149. *Id.*

150. *Id.* at 248.

151. Hermann S. Merrell, *The Calculation and Collection of Attorney's Fees*, L. OFF. ECON. & MGMT., Aug. 1960, at 20, 20. For a list of the many articles from the legal press in the 1950s and early 1960s that unhappily noted lawyers' declining incomes, see sources cited in ROSS, *supra* note 2, at 16 n.62.

152. THE 1958 LAWYER, *supra* note 142, at 5 (footnote omitted).

153. Cantrall, *supra* note 142, at 196.

154. Loevinger, *supra* note 145, at 615.

155. Dwight G. McCarty, *Determining the Lawyer's Fee*, 5 L. OFF. ECON. & MGMT. 9, 9 (1964).

156. *See* Gerhart, *supra* note 71, at 233; *Law Students Off Half in Relation to Population*, AM. B. NEWS, Mar. 15, 1960, at 1, 5.

157. *See supra* note 156.

Our theoretical predictions that discovery would produce a decline in litigators' income are consistent with data that demonstrate that the largest decline in lawyers' incomes after 1938 occurred in litigation, rather than in transactional legal services. By the late 1950s and early 1960s, firms viewed litigation as a money-loser.[158] A firm might maintain its litigation department "even though it may be the least lucrative branch of the firm."[159] In 1958, a lawyer explained that, although litigation was often unprofitable, "it's a service we have to provide, and at worst it can be looked on as a sort of loss leader."[160] Even as late as the early 1970s, a survey of law firms indicated that "[f]ew firms make money from litigation. They look upon the litigation department as a loss-leader, something to lure clients into the office."[161] In such firms, the decline in the profitability of litigation tended to reduce incomes for all of the firms' partners, including transactional lawyers.[162]

As litigation became less lucrative, lawyers and law firms shifted out of litigation and into transactional work.[163] By 1964, a list of "significant developments in the legal profession" included "a shift in the pattern of legal work toward less litigation and more office practice."[164]

The decline in lawyers' incomes occurred because price stickiness prevented legal fees from rising quickly enough to cover cost increases, such as those caused by wide-open discovery. Discovery caused an immediate increase in expense: It required lawyers to work longer hours and to hire additional staff and associate attorneys, and to rent space and buy supplies for them. However, the fixed fees that lawyers received rose more slowly, responding to the increased costs only with a lag. As ABA publications noted with alarm, the decline in lawyers' incomes occurred because lawyers' gross incomes rose more slowly than expenses.[165] A commentator noted in 1964, "Statistics and the results of many surveys in the fifties revealed that the legal profes-

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158. *See* GALANTER & PALAY, *supra* note 61, at 32.

159. BERYL H. LEVY, CORPORATION LAWYER: SAINT OR SINNER 64 (1961), *quoted in* GALANTER & PALAY, *supra* note 61, at 32.

160. Spencer Klaw, *The Wall Street Lawyers*, FORTUNE, Feb. 1958, at 140, 144, *quoted in* GALANTER & PALAY, *supra* note 61, at 32.

161. PAUL HOFFMAN, LIONS IN THE STREET: THE INSIDE STORY OF THE GREAT WALL STREET FIRMS 42 (1973), *quoted in* GALANTER & PALAY, *supra* note 61, at 33.

162. The decline in the average income of all lawyers grouped together probably masks a larger decline in litigators' incomes. The average included not only the declining incomes of litigators, but also transactional lawyers' incomes, which remained relatively stable. *See supra* text following note 141 and text accompanying notes 158-61.

163. *See* MACKINNON, *supra* note 72, at 17.

164. *Id.*

165. *See* THE 1958 LAWYER, *supra* note 142, at 5. *See also generally* MAURICE LIEBENBERG, U.S. DEP'T OF COMMERCE, INCOME OF LAWYERS IN THE POSTWAR PERIOD, SURVEY OF CURRENT BUSINESS (1956).

sion had not adapted itself to such changing conditions and was rapidly becoming an impoverished profession."[166]

The price stickiness that appears to have prevented fees from keeping pace with the new expenses occurred for a combination of four reasons. First, price stickiness could have been caused by a decline in demand for litigation services. However, this appears to be an inadequate explanation. During the postwar economic boom, many litigators had as much business as ever and were working as hard—or harder—than they had before 1938. But they were making less money at it because their costs had increased.[167]

Second, we would expect to see price stickiness if demand for litigation services were extremely sensitive to price. If the price-elasticity of demand were high, then litigators would be unable to raise prices because any price increase, even one caused by an increase in costs, would produce a large reduction in demand. However, demand for many types of litigation services would not appear to be extremely price sensitive. For example, an institutional defendant who has been sued for large damages is not likely to be extremely price sensitive in hiring a lawyer.

Third, price stickiness might exist for a period if clients did not understand immediately the degree to which discovery had increased costs for all litigation.[168] Clients would resist price increases for a product that they had purchased for years at a given price. Although, in the years after 1938, discovery caused litigation of a case to become more expensive, a corporate client that had paid a given fixed fee for litigating a given type of case in 1937 might resist paying a higher fixed fee for litigating exactly the same type of case in 1957. The corporate client might resist an increase in a fixed fee to $2000 in 1957 for litigating a case that the client had paid $500 to litigate in 1937. The client might fail to recognize immediately that litigating a case before broad discovery existed was effectively a different product with lower production costs than litigating a case with broad discovery.

For the period when clients, as a group, refused to recognize the increase in litigators' costs, the market would fail to reach equilibrium. If this source of price stickiness was at work, then litigators would receive lower incomes than they could have earned in other careers, some lawyers would leave litigation and switch to transactional work, and applications to law schools would decline. Each of these occurred in the two decades after 1938, suggesting that this source of price stickiness indeed was important.

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166. Henry Latimer Jordan, *A Time Billing System*, 5 L. OFF. ECON. & MGMT. 37, 37 (1964).

167. As would be expected during the postwar economic boom, lawyers' commentary during the period blamed lawyers' falling incomes on increasing costs, not on any decline in their amount of available work. *See, e.g.*, sources cited *supra* note 142.

168. In economic terminology, the introduction of broad discovery shifted litigators' supply curve upwards.

Fourth, price stickiness would exist because the system of fixed fees permitted fees to be adjusted only with a lag. Because of fear of losing the client to cheaper competitors, a lawyer would choose to increase the fixed fee for litigating a case only after a substantial period of experience demonstrated that the fee no longer covered the case's expenses or offered a reasonable profit. In addition, the lawyer and client would agree to an increase in a monthly or yearly retainer fee only after a period of experience had demonstrated that the existing fee was inadequate. A client might not agree to an increase merely because a yearly fee had failed to cover the lawyer's costs in one year. The client would reason that a retainer agreement's fundamental characteristic was that a retained lawyer accepted the risk that, in a given year, extraordinary costs might exceed the retainer payment; on average, high costs one year would be balanced by low costs in other years. Only if costs exceeded the payments for several years might the client be willing to renegotiate for a larger yearly retainer payment.

Because of the lag in price adjustment, the new expenses from wide-open discovery could suppress lawyers' incomes for years, even decades.[169] Broad discovery caused costs continually to increase for more than a quarter century after 1938 as states slowly adopted discovery provisions that mirrored the Federal Rules and as lawyers learned over time to exploit discovery fully.[170] Because costs rose continuously, the price increase that a lawyer would propose to cover last year's cost increase might fail also to cover this year's increase. Spiraling costs might continually outpace price increases.[171]

D.   Uncertainty and Fallen Incomes Cause Demand for Hourly Billing

Both of the products of wide-open discovery—the greater cost uncertainty and the decline in income—harmed lawyers. Lower income harmed lawyers directly. In addition, both because lawyers were generally risk averse and because many were paid by fixed fees, the additional cost uncertainty was equivalent to a further decrease in

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169. *See infra* note 171.

170. *See supra* text accompanying note 107.

171. The decline in lawyers' incomes mystified the profession. Some commentators thought that the cause of the decline was that lawyers had become inefficient. *See* Unterberger, *supra* note 142, at 40-41. However, the commentators did not explain why only lawyers were inefficient, while the rest of the economy enjoyed rising incomes. Others thought that the decline was due to nonlawyers beginning to take from lawyers the kinds of work that had earlier been reserved to lawyers. *See id.* However, this would not explain the fall in incomes for litigators, who faced no competition from nonlawyers. Others suggested that demand for legal services had declined because recent corporate mergers had reduced the number of companies that required legal services. *See id.* at 44. However, recent experience suggests that mergers do not decrease demand for legal services. Instead, both the booming economy that accompanied the mergers in the 1940s and 1950s and the economy's increasing complexity would have been expected to expand demand for legal services substantially. Demand for litigators might rise less than demand for transactional lawyers, but it would rise nonetheless.

lawyers' incomes. For a risk-averse lawyer who was paid a fixed fee, an increase in uncertainty as to the costs and time that the lawyer would expend was equivalent to an increase in uncertainty for the lawyer's income. Because the lawyer's income was the difference between the fixed fee and the lawyer's costs for earning the fee, greater uncertainty in costs meant greater uncertainty in income. This greater income uncertainty reduced the lawyer's happiness just like a further decline in income. Because he was risk averse, the lawyer would have been willing to exchange the risky income that he received for an income that was lower but certain.[172]

Figure 2 illustrates discovery's impact. As in figure 1, the vertical axis measures the expected net income that the lawyer expects to earn from working on a given task or case, and the horizontal axis represents the lawyer's level of uncertainty about whether she will actually receive that amount. In addition, we include several indifference curves, each of which indicates combinations of uncertainty and expected income among which attorneys would be indifferent.

FIGURE 2
DISCOVERY AND THE OPTIMAL CONTRACT
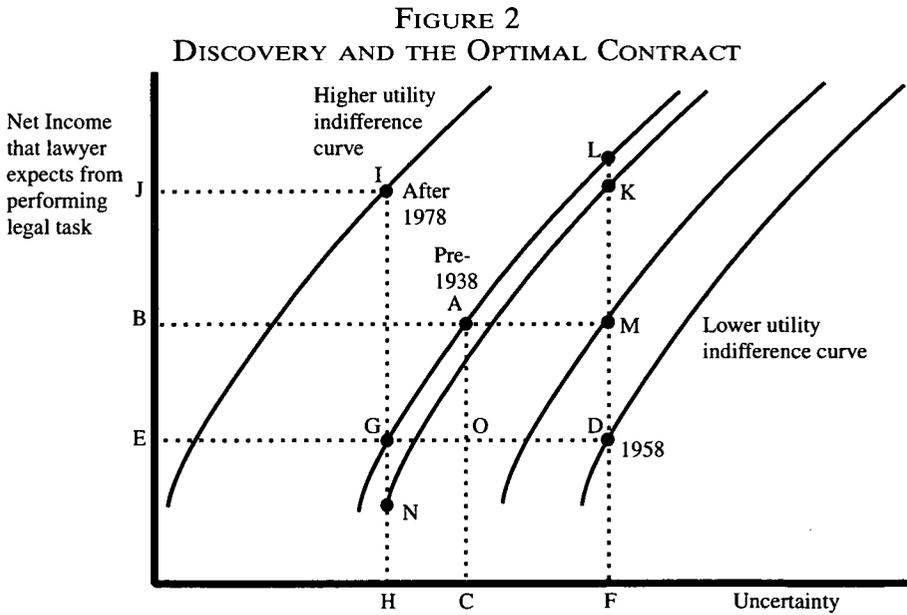
In 1937 before the introduction of modern discovery, the legal profession was at point A. The net income that lawyers expected to receive in a given case under their fixed-fee arrangements was moderate. In addition, lawyers experienced moderate uncertainty about the amount that they would actually receive—about whether their expectation would turn out to be true. A lawyer's fixed-fee agreement for

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172. See supra Part II.D.2.

completing a given task meant that any degree of uncertainty about the cost of completing the task caused an equal degree of uncertainty about the net income that the lawyer would receive for completing the task.[173] Before discovery was introduced, cost uncertainty was modest; a lawyer could predict quite reliably the time and expense for completing the task. Thus, income uncertainty was also modest.

In the years after 1938, discovery contributed to a decline in incomes from given cases and an increase in uncertainty about the size of the incomes.[174] By 1958, the profession had moved to point D. Either the increase in uncertainty or the fall in income would have, alone, harmed lawyers. An increase in uncertainty, with expected income remaining constant, would have moved the profession from A to M. Despite the unchanged expected income, the increased risk would have made lawyers less happy, as represented on the figure by the move to a lower indifference curve. Likewise, the decline in income, even without the increase in uncertainty, would have made lawyers less happy; point O is below and to the right of the indifference curve that includes A. Together, the lower income and higher risk inflicted a disheartening blow, moving the profession far down and to the right in the figure.

A worried profession was forced to confront both the higher uncertainty and lower incomes that had followed the introduction of broad discovery. Among the organized bar's solutions for both of the problems was a switch to hourly billing. The bar addressed the increased uncertainty by the single remedy of shifting to hourly billing. It attempted to increase lawyers' incomes both by championing hourly billing and by establishing a fixed-fee cartel. Clients did not resist hourly billing. To the contrary, as our model predicts, clients also demanded hourly billing.

1. The Profession Promotes Hourly Billing to Reduce Uncertainty

We now describe how, to reduce income uncertainty, the organized bar proposed a switch for litigation from fixed-fee billing to hourly billing. Recall the theoretical model's two predictions that if the lawyer is more risk averse than the client, increased cost uncertainty will encourage a shift from fixed-fee billing to hourly billing and that hourly billing will be especially optimal if lawyers tend to be loyal to their clients' interests.[175] Applying our theoretical model's conclusions to the conditions in the legal profession after the adoption of wide-open discovery, we see that the two conditions for hourly billing to be efficient existed. First, most institutional clients were less risk

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173. *See supra* note 40 and text accompanying notes 40-41.
174. *See supra* Parts III.B, III.C.
175. *See supra* Part II.D.5.

averse than their lawyers.[176] In contrast, some individual clients were more risk averse than their lawyers. As our model predicts, lawyers who represented these individual clients, rather than institutions, resisted the rest of the profession's movement to hourly billing. In some settings, these lawyers have continued to represent their individual clients under fixed-fee contracts.[177] These include contingent-fee arrangements for plaintiffs in a variety of contexts and task-based fixed-fee billing for some simple matters with relatively certain costs, such as preparation of uncontested divorces and simple wills.

Second, it is said that, during these transitional years, a tradition of trust, civility, and loyalty pervaded much of the profession.[178] Lawyers may have been relatively resistant to the incentives that hourly billing presented to overbill clients. Thus, hourly billing's benefits in efficiently redistributing risk would be large, while the harms from the moral hazard that it created would be small.

Figure 2 illustrates graphically the theoretical model's lessons for lawyers who represented institutions in the decades after 1938. The figure shows the benefits to both lawyer and client of responding to increased cost uncertainty from discovery by switching from fixed fees to hourly billing. By the late 1950s, the legal profession found that it had moved from point A, with high income and low cost uncertainty, to point D, with lower income and higher cost uncertainty. We will see that the profession attempted to increase lawyers' incomes directly, toward point K in the figure.[179] However, any price increase was a zero-sum loss to consumers. Every additional dollar that lawyers received from the price increases came directly out of their clients' pockets.

The figure shows that lawyers could achieve an increase in their happiness that was at least as large as the happiness increase from the price rise to K by switching from fixed fees to hourly billing so as to reduce cost uncertainty. Even if the expected amount that the client paid remained entirely unchanged, a switch from fixed fees to hourly billing would be represented in the figure as a move from D to G. The switch would decrease income uncertainty for lawyers; hourly billing would eliminate the risk that the lawyer would suffer an unexpected windfall or loss. The benefits to lawyers from the decrease in uncertainty are greater than the benefits of the price increase. Point G is on a more desirable indifference curve than point K, and the switch to hourly billing increases lawyers' happiness as much as an increase in the size of a fixed fee all the way to L.

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176. *See supra* text accompanying notes 35-36.
177. *See infra* text accompanying note 284.
178. *See, e.g.*, GALANTER & PALAY, *supra* note 61, at 32-36; GLENDON, *supra* note 61, at 17-39; KRONMAN, *supra* note 61, at 291-92; ROSS, *supra* note 2, at 5-6.
179. *See infra* Parts III.D.3, III.D.4.

Because institutional clients were relatively risk neutral, they would care only about their expected total payments to their lawyers. Uncertainty would not concern them. These clients would be relatively indifferent between fixed fees at D and hourly billing at G.

The clients would be concerned that hourly billing would create incentives for overbilling. However, once uncertainty passed a threshold, the benefits to the lawyer of shifting the risk to the client would outweigh the moral hazard's cost to the client. Room for a deal would exist. The lawyer would offer a low hourly rate, the savings from which would compensate the client for the moral hazard. Both client and lawyer would benefit from hourly billing. Both might even demand it.

For example, suppose that a lawyer who was presently at point D in figure 2 hoped to improve his fortunes by modifying his fee arrangement with his client. He could propose a large increase in his retainer for the next year, to point K. This would increase the lawyer's expected income, but would not reduce his risk cost. His income would be higher than before, but just as uncertain. Alternatively, instead of proposing the fee increase, the lawyer could propose a change to hourly billing, to a point such as N. The shift to hourly billing would benefit the lawyer as much as a large pay raise. The shift to hourly billing at N would benefit the lawyer as much as an increase in the size of fixed-fee net income all the way to point K; the figure shows that the lawyer is indifferent between points N and K. At N, although the lawyer's expected income is lower than at point K, the lawyer is just as happy as at K because the lawyer's uncertainty is lower. For the risk-averse lawyer, hourly billing's elimination of risk is equivalent to a large increase in the size of a fixed fee.

However, unlike the fee increase to K, the shift to hourly billing would benefit not only the lawyer, but also the client. At N, the income that the lawyer would expect to receive from the client under hourly billing would be lower than under fixed-fee billing—that is, the lawyer's expected income at N is below his expected income at D. The client prefers hourly billing at N to fixed-fee billing at either D or K. Because the client is relatively risk neutral, the client cares less than the lawyer about accepting risk. By accepting hourly billing, the less risk-averse client reduces expected legal fees, moving to N. The reduction in fees would more than compensate for any cost of moral hazard. Both client and lawyer benefit from the shift to hourly billing. The risk-averse lawyer would enjoy a reduction in uncertainty. The less risk-averse client would enjoy a reduction in expected legal fees.

In the late 1950s and early 1960s, the legal profession began to behave as the theoretical model predicted. After attorneys began to note the large new cost uncertainty that discovery caused, they recognized that a switch to hourly billing would benefit attorneys who were

involved in litigation. Although attorneys recognized that fixed-fee billing reduced risk for the client,[180] they also recognized that fixed fees increased risk for the attorney and could make fixed fees undesirable. For example, a survey that was published in 1951 noted that discovery had led to great expense and great uncertainty. In particular, the survey noted that discovery had caused cost uncertainty that deterred attorneys from continuing to use fixed-fee retainer billing.[181] The survey described the experience of a typical respondent: "One attorney stated that the possibility of prolonged discovery before trial made him hesitate to accept retainers from persons with limited means because, although he could reasonably estimate the time required for other aspects of the case, he could not forecast the time required for discovery."[182]

Because of the increased cost and uncertainty from discovery, fixed fees were especially undesirable for litigation matters. Before discovery's introduction, lawyers had routinely billed litigation matters on a fixed-fee basis.[183] However, as our theoretical model predicts, after discovery increased cost uncertainty, attorneys rebelled against fixed-fee billing for litigation. Lawyers recognized that costs in litigation were now too uncertain to bill on a fixed-fee basis. Thus, unlike before discovery's introduction, lawyers now viewed fixed fees as unsuitable for litigation matters.[184]

Accordingly, the profession called for a switch from fixed-fee billing to hourly billing for litigation but not for transactional work. Transactional work could continue to be billed by fixed fees. Because discovery had caused uncertainty and costs to increase only for litigation, lawyers and clients would benefit mutually only from hourly billing for litigation. For example, a leading billing manual from the early 1960s recommended, "Certain items, such as trial work or extraordinary matters, should be excluded from the retainer and billed separately."[185] The manual suggested that the lawyer and client would use time-based billing for the litigation that the retainer excluded.[186]

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180. *See, e.g., supra* text accompanying note 71. For example, a partner at a large Minneapolis law firm described how fixed-fee retainer billing reduced uncertainty and surprises for the client:

  For the client, I feel that two factors are the most significant in connection with such arrangements: . . . 2) The client would rather spread his fees and legal expense instead of having the bulk of them come at the moment a particularly happy (or unhappy) matter comes to a head.

Retainers—A Symposium, supra note 28, at 258 (comments of Harding A. Orren).

181. *See* Speck, *supra* note 13, at 1152.

182. *Id.*

183. *See supra* Part III.A.

184. The only exceptions were cases where the client was even more risk averse than the lawyer. As our theory predicts, lawyers continued to bill these clients, typically individuals with few assets, under contingency agreements, a form of fixed-fee contract. *See infra* text accompanying note 284.

185. Gerhart, *supra* note 71, at 246.

186. *See id.*

Although fixed-fee retainer agreements could still cover legal services other than litigation, the cost uncertainty that wide-open discovery introduced into litigation precluded fixed retainers for litigation. A model fixed-fee retainer agreement from the early 1960s for legal services for a corporation embodied this distinction, continuing to include transactional work in the fixed fee, but excluding litigation because of litigation's cost uncertainty:

> The retainer will cover office conferences, drawing of ordinary business documents, contracts, deeds, etc., as well as legal advice to the corporation and its officers when requested. The retainer, of course, would not include the trial of any litigated matters in court or before Federal or administrative agencies. In such cases we cannot usually determine in advance the amount of work that will be required.[187]

Similarly, a 1960 primer on billing practices for lawyers, written by a law firm partner, advised:

> The lawyer must make it clear to the prospective client that it is generally impossible to predict in advance how much time and attention will be required to bring a litigated matter to a conclusion. The client should understand that these uncertainties would make it unfair either to the lawyer or the client to fix the ultimate fee in advance.[188]

We have seen that the source of much of the lawyer's uncertainty about how much a case would cost to litigate was the lawyer's inability to control the adversary's discovery choices. The lawyer could not predict whether the adversary would seek much discovery, and so impose work and expense on the lawyer, or instead seek little discovery.[189] Thus, in the decades after the introduction of wide-open discovery, many lawyers for the first time began to complain that litigation costs were too unpredictable to bill under a fixed-fee agreement. For example, a decade after discovery's introduction, a partner in a Michigan law firm explained in a primer on legal fees why a lawyer should refuse to quote a fixed fee for litigation:

> Perhaps this is as good a place as any to discuss the question sometimes propounded by certain clients—"How much is this going to cost?" The lawyer knows that it is difficult, if not impossible, to give an estimate of time to be expended in a given case,

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187. *Retainers—A Symposium, supra* note 28, at 256 (comments of Eugene C. Gerhart). Another primer on proper billing practices advised the attorney that:

  it is not amiss to write a letter stating . . . that the arrangement includes all of the legal work that the client will have with the exception of court work, out-of-town work, legal services before boards or commissions, and legal work of an unusual nature, not customarily encountered by the client.

Rosenburg, *supra* note 72, at 19.

188. Merrell, *supra* note 151, at 22.

189. *See supra* text accompanying notes 123-27.

especially in that type of case where he is confronted with the possibility of opposing counsel placing obstacles in his path.[190]

Likewise, the managing partner of a large Boston law firm noted in 1964: "Cases to be fought in court should be exempt from *all* retainer agreements. Here you have an adversary whom you cannot control."[191] A partner at a Minneapolis firm concurred: "I agree with Mr. Smith that no retainer arrangement can cover litigation."[192]

Similarly, a survey in 1963 found that attorneys had now come to reject fixed-fee billing for litigation matters because of the uncertainty of the litigation process: "A number of lawyers have indicated that they see no reason for a maximum fee schedule. They argue that divorce cases, for example, may become involved and necessitate a very large fee which could not be predicted at the onset."[193]

Today, many lawyers continue to believe that fixed-fee billing is inappropriate for litigation because of the unpredictability of both litigation expenses and the adversary's behavior. The unpredictability typically stems from issues that relate directly or indirectly to the discovery stage of litigation. For example, a recent book on billing practices surveyed attorneys' beliefs about various billing practices, and it concluded that fixed-fee billing was inappropriate for litigation matters because of the uncertainty of the litigation process. Quoting a New York City litigator, the book noted that a variant of fixed-fee billing

"could lead to disaster" because a client might not be willing to re-negotiate a fee when the case was more complex than originally anticipated . . . . The respondent pointed out "the time required for most jobs is impossible to predict. The contentiousness of my adversary, the cooperation of my witnesses, their abilities and motivations, the complexities of issues not understood at the outset—all of these issues make predictions of how much time a case should take impossible—at least impossible with a reasonable precision." The lawyer concluded that "only time-based billing is fair."[194]

Another respondent with a solo practice noted that "flat fees are 'clean and neat . . . but they're a big gamble on litigation issues, where it's real difficult to "ball park" ahead because so much of what you do

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190. Rosenburg, *supra* note 72, at 20.

191. *Retainers—A Symposium,* supra note 28, at 252 (comments of Reginald Heber Smith).

192. *Id.* at 253 (comments of Harding A. Orren).

193. Richard B. Bauer, *Internal Fee Schedules,* 4 L. Off. Econ. & Mgmt. 443, 445 (1964). Likewise, a handbook on law practice advised that fixed fees were appropriate for physicians, because costs were predictable, but not for lawyers: "Their services are more amenable to definite fixed charges than those of the lawyer. From every standpoint it seems more reasonable and practicable for a lawyer to base his charges in most cases on the cost of rendering the services in the particular case." McCarty, *supra* note 64, at 97.

194. Ross, *supra* note 2, at 239.

is controlled by the response of the other side.'"[195] Similarly, a recent billing handbook notes:

> A number of lawyers are hesitant to use fixed fees because it is difficult to estimate the fee in complex cases or in matters where the lawyer has little control over the activities of opposing party or counsel and the judge. Because many lawyers do not have accurate management or statistical information concerning the cost of providing certain types of legal services, there is a risk of losing money if the fee is too low.[196]

Another recent book on billing concludes as follows about fee arrangements in which the client pays a fixed amount per task: "Task-based billing . . . presents the difficult problem of how to assign specific dollar amounts to tasks that may vary drastically in difficulty from case to case."[197]

2. Clients Demand Hourly Billing

Our theoretical model predicts that, after discovery's impacts were felt, relatively risk-neutral clients would demand hourly billing.[198] The model indicates that a switch to hourly billing would permit the lawyer to eliminate some of the costly new uncertainty that resulted from wide-open discovery and so would permit the lawyer to charge a lower total price for litigating a case than if the lawyer continued to charge a fixed fee. Lawyers would have an incentive to offer clients a choice between, first, a large fixed fee and, second, hourly billing with lower expected total payments. If uncertainty increased substantially, then the savings that lawyers would be able to offer clients would more than compensate the clients for any moral hazard.

History confirms these predictions. After broad discovery became prevalent, lawyers began to offer clients a choice between a high fixed fee and hourly billing with a lower expected total fee. In effect, they offered discounts to clients who would agree to hourly billing. In addition, many institutional clients, like their lawyers, began to demand hourly billing. Suggestions that lawyers forced hourly billing on unwilling clients are incorrect.[199]

As the model predicts, in the decades after 1938, comments were frequently made about how hourly billing benefited clients because it

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195. *Id.* at 241.

196. Ezra Tom Clark, Jr., *Getting Out of the Hourly Rate Quagmire—Other Billing Alternatives, in* BEYOND THE BILLABLE HOUR, *supra* note 65, at 183, 185.

197. ROSS, *supra* note 2, at 263.

198. *See supra* Part II.D.4.a.

199. For example, one history of lawyers' billing methods indicates: "In a market in which legal services were relatively scarce and lawyers enjoyed a monopoly, clients lacked bargaining power and acquiesced to a form of billing that seemed to give lawyers greater control over the size of their profits." ROSS, *supra* note 2, at 22 (citing F. Leary Davis, *Back to the Future: The Buyer's Market and the Need for Law Firm Leadership, Creativity and Innovation*, 16 CAMPBELL L. REV. 147, 158 (1994)).

reduced uncertainty and so permitted lawyers to charge lower fees than under fixed-fee billing—lawyers often said 25% lower.[200] Some attorneys would offer a choice between hourly billing and a fixed fee that substantially exceeded the expected charges under hourly billing. For example, a primer on attorney's fees noted: "Occasionally, a client will insist upon being given a fixed fee in advance. Such a client should be charged at least 25% more than the average fee for the particular service because he is making the lawyer gamble."[201] Another primer noted:

> Of course, you should avoid if at all possible quoting a set fee in advance since we don't always know what it is going to cost and, if required to set a fee in advance, many lawyers suggest that you increase your estimate approximately 25% since the client is asking you to gamble with him.[202]

Yet another primer counseled:

> There are clients who want to know in the very outset just how much the lawyer is going to charge. In minor matters this presents no difficulty, but on large ones it does. On the larger matters the client will fare better if he permits his lawyer to fix his fee after the services are performed. To fix a fee before the services are performed presents an element of chance. The lawyer may have some idea as to what is to be done, but more often than not he is not sure just what work he will have to do.[203]

Recently, a consultant on legal fees advised "that any flat fee must 'allow for a giant margin' because legal costs are so hard to predict."[204]

Because of the benefits of hourly billing to both clients and lawyers, demand for hourly billing came not only from lawyers, but also from clients.[205] For example, a recent historical study of the legal profession in Atlanta noted, "In Atlanta, hourly rates were first insisted upon by in-house general counsel of major national corporations beginning in the 1960s."[206] Indeed, clients often sought more eagerly a switch to pure hourly billing than did lawyers; as discussed below, many lawyers initially preferred an intermediate hourly billing approach in which time was only one of several factors.[207] A commentator notes: "Most firms were not happy when their clients required them to base their charges solely on hourly rates. They acquiesced to

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200. *See infra* notes 201-02 and accompanying text.
201. Merrell, *supra* note 151, at 22.
202. Howard H. Moldenhauer, *Fees and Billing Practices*, 29 ALA. LAW. 138, 142 (1968).
203. E. H. Smith, *Adventures in Fee Making*, 12 KY. ST. B.J. 31, 32 (1947).
204. Ross, *supra* note 2, at 241 (quoting legal auditor John J. Marquess).
205. As noted in GALANTER & PALAY, *supra* note 61, at 34, "Some firms began billing by the hour, a practice that proved popular with clients, so that by the middle 1960s billing for lawyer hours became the standard method of calculating fees."
206. TROTTER, *supra* note 64, at 28.
207. *See infra* text accompanying notes 259-62, 264-69.

the change because their clients required it."[208] Another commentator confirmed that clients demanded hourly billing:

> That is, it was not something foisted off onto an unsuspecting business community by a bunch of sharp-eyed lawyers . . . . Rather, as the offices of corporate general counsel became professionalized (in a business sense, not a legal sense), there was a need to apply business principles to their operation, including the purchase of outside services.[209]

3. The Bar Seeks Hourly Billing to Increase Incomes

In addition to proposing hourly billing as a means to reduce the increased uncertainty that had followed discovery's expansion, the bar also promoted hourly billing to increase lawyers' incomes—although our model and the historical record suggest that hourly billing, contrary to lawyers' hopes, may actually have decreased the cost of legal services.[210] In a torrent of publications, bar associations and experts on billing wrote that hourly billing was the profession's best hope for helping lawyers' falling revenues to rebound and overtake soaring costs.[211] The publications stressed repeatedly a main message: "[T]hose who keep time records will earn more than those who do not."[212] They argued that hourly billing would reverse the slide in lawyers' incomes that had followed discovery's expansion and that had caused lawyers not to participate in the explosive postwar earnings

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208. TROTTER, *supra* note 64, at 28. It is theoretically possible that the introduction of broad discovery might also increase the danger of moral hazard under hourly billing; the great unmonitorable discretion that discovery grants attorneys might induce attorneys under hourly contracts to pad their bills. *See supra* note 62. If this is so, then broad discovery's introduction would have two opposing impacts. First, discovery would make hourly billing more desirable by distributing risk optimally. Second, discovery would make hourly billing less desirable because discovery would increase the danger of moral hazard under hourly billing. The historical record suggests that the first impact was larger than the second impact; discovery helped to cause clients and attorneys to switch to hourly billing despite any increased danger of overbilling. *See infra* Part III.E. Alternately, discovery may have increased the danger of moral hazard not only under hourly billing, but also under fixed-fee contracts. If the increase was equal for both types of contract, then the increased moral hazard would have had no influence on the optimal contract.

209. Herbert M. Kritzer, *Lawyers' Fees and the Holy Grail: Where Should Clients Search for Value?*, 77 JUDICATURE 186, 187 (1994). In addition, hourly billing fit corporations' growing accounting culture. As a history of billing practices notes, "hourly billing was well received quickly by clients," and a major reason was that hourly billing enabled business clients to "correlate the 'product' that they were buying to the products that they themselves produced and sold," and made it easier for corporate managers of outside counsel to "justify the payment of those bills to their superiors at corporate headquarters." Altman, *supra* note 65, at 11; *see also* Kritzer, *supra*, at 187 (stating that accounting culture caused business clients to prefer hourly billing). Another commentator notes that hourly billing's "current form probably results largely from the accounting culture, produced by elite business schools, that came to dominate the senior management circles of the American corporation." *Id.*

210. *See supra* Part II.D.4 and *infra* text accompanying notes 281-83.

211. *See, e.g.*, McCARTY, *supra* note 64, at 82-114; Gerhart, *supra* note 71, at 233-35, 239.

212. Miller, *supra* note 90, at 158.

growth in other professions. Hourly billing might even permit lawyers once again to earn as much as doctors.[213]

For example, a leading handbook on management of the law office devoted an entire chapter to recommending time-based billing. Noting that doctors' incomes had surged ahead of lawyers' incomes after 1940, the chapter urged, "It is vital today that we lawyers recapture our traditional financial position in the community if we are to maintain the prestige and respect due us and our profession."[214] Thus, the book continued, "The time has surely come for the lawyer to learn the art of properly billing clients—and to abandon the role of infidel!"[215] Another billing primer noted that many lawyers had not yet implemented time-based billing:

Instead, most of us started, continued and yes, even concluded our legal careers by quoting set fees in advance, by following antiquated fee schedules or by estimating what we honestly felt to be a fair fee for the legal services we rendered. The result has been that we have cheated ourselves out of a fair livelihood, have deprived ourselves of the financial benefits we deserved and have struggled in a vain attempt to fight the losing battle of soaring overhead costs.[216]

At first, the recommended solution was a close cousin of hourly billing: The lawyer would keep track of hours worked and bill the client based primarily on the number of hours. However, in setting the bill, the lawyer would also consider other factors.[217] A billing handbook noted:

The basic time charge is the basis of the charges on a client's bill, but it is not the final charge. It is recognized as a minimum. Before a bill is rendered, it is proper to canvass the situation and determine what a proper charge would be in the light of all the circumstances of the case.[218]

Only later would the bar recommend a movement beyond this intermediate billing method to pure hourly billing.[219]

The organized bar's mobilization to promote time-based billing produced hundreds of books, articles, and seminars that used similar language and arguments to reach similar conclusions: This intermediate form of time-based billing was the profession's route to riches and prestige.[220] The organized bar's efforts began in earnest in 1958, when

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213. *See infra* notes 214-16 and accompanying text.
214. Gerhart, *supra* note 71, at 235.
215. *Id.* at 233.
216. Miller, *supra* note 90, at 157.
217. *See* Gerhart, *supra* note 71, at 239-43.
218. McCARTY, *supra* note 64, at 89-90.
219. *See id.* at 90. Even in 1972, after many firms had moved to hourly billing "on a pure time basis," a handbook on law practice indicated, "This trend, it seems to me, is fraught with danger for many reasons." Miller, *supra* note 90, at 162.
220. *See, e.g.*, McCARTY, *supra* note 64, at 82-114 (recommending "time-charge" billing).

the ABA distributed to all of its members a pamphlet that described how timekeeping would increase lawyers' incomes.[221] As an ABA committee noted in 1969, recalling a decade of the bar's proselytizing for time-based billing, "During the past ten years the American Bar Association Committee on professional economics, as well as state committees on economics, have preached the gospel that the lawyer who keeps time records makes more money."[222] Likewise, after noting lawyers' decline in income during the 1940s and 1950s, a 1972 handbook noted, "Fortunately, the leaders of the organized bar recognized the existence of the problem and, through literally hundreds of economics committees throughout the United States and Canada, brought the importance of timekeeping methods to the practicing lawyers."[223] Referring to Abraham Lincoln's purported statement that "time is an attorney's stock in trade,"[224] the handbook noted, "Bar association committees have sponsored economics seminars throughout both of our countries and have sent lecturers afield to spread the doctrine first announced by Mr. Lincoln."[225]

The basis for the bar's recommendations of hourly billing were studies from the late 1950s through the early 1970s that purported to show that time-based billing increased lawyers' incomes substantially. The surveys seemed to show that lawyers who used time-based billing earned more than those who did not.[226] As a 1972 ABA publication noted:

> Without exception every known economic survey of the legal profession has reflected the fact that on the average the timekeeping lawyer has greater gross income from his practice than the lawyer who does not keep records or keeps them on other than a regular basis.[227]

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221. *See* THE 1958 LAWYER, *supra* note 142, at 7-13.

222. Joseph E. Roehl, *Effective Utilization of Billing Techniques*, *in* STANDING COMM. ON ECON. OF LAW PRACTICE OF THE AM. BAR ASS'N, PROCEEDINGS OF THE THIRD NATIONAL CONFERENCE ON LAW OFFICE ECONOMICS AND MANAGEMENT 161, 161 (1969).

223. Miller, *supra* note 90, at 157.

224. *See e.g.*, ROSS, *supra* note 2, at 263 ("Since, as Abraham Lincoln is supposed to have said, 'time is an attorney's stock in trade,' time is the logical starting point for calculating an attorney's fee."); Miller, *supra* note 90, at 157 ("Over one hundred years ago, we were admonished by our learned brother at the bar, Abraham Lincoln, that 'A Lawyer's Time and Advice are his Stock in Trade.'").

225. Miller, *supra* note 90, at 158. The use of Lincoln's words as a basis for supporting time-based billing is ironic because, when Lincoln practiced law, lawyers did not use time-based billing. *See, e.g.*, ROSS, *supra* note 2, at 9-15.

226. *See, e.g.*, Miller, *supra* note 90, at 158 ("Miss Bethel has conducted surveys for many state and local bar associations and the results are unanimous: those who keep time-records will earn more than those who do not."); *see also* ROSS, *supra* note 2, at 16; Comm. on Econ. of the Bar, *Benchmarks for Your Practice: A Paul Bunyan Success Story*, J. MO. B., Apr. 1961, at 167, 167-68; Steele Hays, *Fees, Time and Conscience*, 4 L. OFF. ECON. & MGMT. 161, 165-66 (1963).

227. Miller, *supra* note 90, at 158.

After referring to the ABA's "gospel that the lawyer who keeps time records makes more money," another ABA handbook concluded, "Every study and every survey made confirms this principle."[228]

The surveys claimed to demonstrate that timekeeping increased lawyers' net incomes by approximately 40%.[229] The common understanding came to be that lawyers who used time-based billing had *net* income—that is, profits—that equaled the *gross* income of lawyers who billed by other methods. For example, after reviewing data on lawyers' higher incomes under time-based billing, a primer on billing methods concluded:

> In order to emphasize the value of the keeping of time, it shouldn't be necessary to go beyond the statement that, as many of you know, *timekeepers will net as much as non-timekeepers gross*. This is indicated by all of the polls and I can also state that it has been proven by my own personal experience.[230]

However, although the ABA's materials asserted that a correlation existed between hourly billing and higher incomes, none of the materials explained why a switch to hourly billing would tend to increase income. None explained why a client would agree to a new form of contract that would increase the client's legal costs, and none have explained why for more than thirty years clients have continued to accept a contract that increased their expenses.

The following are three partial explanations of why hourly billing might, in limited circumstances, increase lawyers' income—although the true cause of the increase in lawyers' incomes probably lies elsewhere.[231] First, because a client could readily detect price increases in fixed fees, and so resist the increases, a lawyer could not easily increase fixed fees to match cost increases. In contrast, a switch from fixed-fee billing to hourly billing would help lawyers to increase their incomes because it would make price increases more difficult for clients to detect. Although a client would resist an increase in a fixed fee from $500 to $2000, the client would tend to resist less a change from charging a fixed $500 fee to charging $50 per hour. The case's litigation costs under the earlier fixed fee could not be compared directly with litigation costs under hourly billing; under hourly billing, the client would not know the case's total litigation costs until the lawyer had litigated the case to completion. A client who compared fixed fees of $500 and $2000 compared apples to apples. A client who compared

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228. Roehl, *supra* note 222, at 161.

229. *See* Jordan, *supra* note 166, at 38; *see also* Miller, *supra* note 90, at 158 (stating that surveys showed that timekeeping increased gross incomes 37% to 60%).

230. Moldenhauer, *supra* note 202, at 148-49 (emphasis in original). Likewise, a leading handbook on legal practice concluded: "The dramatic fact from these statistics is this: lawyers who *do* keep personal time records have a *net* income which is almost equal to the *gross* income of lawyers who *do not* keep time records. Need more be said!" Gerhart, *supra* note 71, at 239.

231. *See infra* text and accompanying notes 279-80.

a fixed fee and an hourly fee compared apples to bricks. The switch to hourly billing would provide the cover to permit lawyers finally to raise their prices to match their new high costs from discovery. Because the switch to hourly billing would cloud comparisons between the prices that lawyers charged before and after discovery's expansion, the switch would permit a transition to higher prices that would finally match the higher costs in discovery's new world.

Second, unlike with hourly billing, increasing the size of a fixed fee was difficult because it required a confrontational zero-sum negotiation with the client. Numerous attorneys recall that obtaining a larger retainer from a client required the attorney to meet with the client and to convince the client that the retainer for the previous year was inadequate.[232] In contrast, hourly billing permitted lawyers to increase their prices more easily. A lawyer could, at any time, announce to all clients that the lawyer was increasing his hourly rate. With fixed-fee billing, prices would not rise unless the lawyer acted and convinced the client to agree to the increase. With hourly billing, the price rise automatically took effect unless the client fired the lawyer or took other action to object. With fixed-fee billing, the default position if the client took no action was no price increase. With hourly billing, the default position was a price increase.

Third, hourly billing may have increased lawyers' income by increasing each lawyer's market power. Hourly billing helped lawyers to avoid competing with each other on price. When lawyers charged fixed fees for a divorce, will, or litigation matter, consumers could easily shop around and compare prices. In contrast, hourly billing made price comparison difficult. A consumer would have difficulty knowing the total price that she would pay the lawyer for a given task. The consumer could not know perfectly whether a lawyer with a low hourly rate would bill many hours, charging more for the task than a lawyer with a higher hourly rate.

However, these explanations do not tell the entire story. Although hourly billing may have helped to increase legal fees in some situations, it probably decreased fees in many others.[233] Instead, another factor was probably more important in causing the rebound in lawyers' incomes. As we discuss below, immediately after the profession began its switch to hourly billing, society's legal complexity increased dramatically.[234]

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232. Comments of various attorneys, including those at an Emory Law & Economics Colloquium, Oct. 29, 1997.

233. *See infra* Part II.D.4.

234. *See infra* notes 279-81 and accompanying text.

4. The Bar Seeks to Increase Income by Enforcing Bar Fixed-Fee Schedules and Excluding Nonlawyers

In addition to attempting to reverse the decline in income by proposing hourly billing, the bar attempted to increase lawyers' incomes by enforcing a horizontal price-fixing agreement and cartel. The ABA recommended that lawyers cooperate in complying with minimum fee schedules for the fixed fees many lawyers still used—that is, engage in horizontal price fixing.[235] Specifically, the ABA recommended that state and local bar associations reduce competition among their members and maintain price discipline so as to raise prices. A pamphlet that the ABA distributed in 1958 to all its members was typical:

> The practice of law is competitive in many respects. Should one lawyer increase his charges to amounts reasonable and proper, but which materially exceed charges of other attorneys in the same locality, the resultant loss of business could more than offset profits on any individual item. In such instances, state and local bar associations can be of great assistance. Through cooperative efforts of individual practitioners, and their bar association, proper increases in the general level of fees may be attained.[236]

Diligent use of fee schedules also was promoted by instruction manuals for law practice. One manual noted, "Fee schedules tend to discourage fee shopping. If there is general public understanding that lawyers are governed in large measure by fee schedules, clients will be less inclined to go lawyer bargain hunting."[237] Another manual openly described the price fixing: "In some localities bar association schedules of fees have been adopted and often there are agitations for such a fixing of charges in order to prevent cutting rates and bidding for clients' business."[238]

The bar attempted to enforce the price fixing in three ways. First, in order to sustain the price fixing and to prevent lawyers from cheating on the cartel, state and local bar associations began strictly to enforce Canon 12 of the ABA's Canons of Professional Ethics. Canon 12 provided that it was unethical for a lawyer to "undervalue" his or her services.[239] In 1961, the ABA's Committee on Professional Ethics

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235. In 1975, the Supreme Court confirmed that the fee schedules were illegal horizontal price-fixing. *See* Goldfarb v. Virginia State Bar, 421 U.S. 773, 783 (1975).

236. THE 1958 LAWYER, *supra* note 142, at 19.

237. COMPLETE GUIDE, *supra* note 72, at 127. The manuals also suggested measures for convincing clients not to object to the price fixing:

> You cannot do much about the form in which the association prints the schedule, but you can at least place your copy in an attractive folder or binder, which will add to its acceptance by your client. In such a folder, possibly black leather with gold lettering, it will have the appearance of prestige and importance and will carry greater weight with your client.

Id.

238. McCARTY, *supra* note 64, at 95.

239. "[I]n fixing fees, lawyers should avoid charges which overestimate their advice and services as well as those which undervalue them." MODEL CODE OF PROFESSIONAL RESPONSIBILITY Canon 12, *quoted in* Contiguglia & Sorapure, *supra* note 131, at 684 n.15.

ruled for the first time that charging fees below those that other law-
yers in the community charged would subject a lawyer to discipline.[240]
An ABA officer wrote in 1963 that lawyers should agree on prices and
should enforce the agreement against price-cutters:

> I think we ourselves badly neglect cooperative action in the mat-
> ter of fees. I think minimum fee schedules should be revised at
> least bi-annually and we should have some means of counseling
> with our wayward brothers who by design operate and set fees at
> between 50% and 75% of the fees charged by the Bar at large.
> We should publicize the fact that the Canons of Ethics prohibit
> the consistent and deliberate charging of substandard fees for the
> purpose of obtaining business and that lawyers who undercharge
> do not enjoy the respect and esteem of their fellows, or the
> courts.[241]

Likewise, citing Canon 12, the bar repeatedly asserted that lawyers
who charged prices below the bar minimums were "cheapening their
profession."[242]

The organized bar's second means for enforcing its price fixing
was to attempt to prevent competition from nonlawyers, who would
have undercut the cartel's prices and caused the cartel to collapse. The
bar called for strict enforcement of the rules against unauthorized
practice of law. The ABA's 1958 pamphlet stated: "There is no magic
formula which will increase a lawyer's income. . . . Unilateral action by
an individual lawyer or a firm will not be sufficient to remedy the
situation."[243] Instead, the pamphlet recommended "[g]reater activity
by associations in public relations, in adopting minimum fee schedules
and encouraging compliance therewith, [and] in preventing the unau-
thorized practice of law."[244] Likewise, as a solution to lawyers' in-
comes lagging behind doctors' incomes, a commentator in 1960
recommended "the return to the lawyer of certain aspects of legal
practice which are being performed by other agencies such as banks
and trust companies, insurance companies, title companies and real
estate agents."[245]

Third, the bar attempted to limit entry into the profession by new
lawyers, who might undercut the cartel's prices. Envying physicians,
who had successfully raised their incomes by shutting down many
medical schools to limit entry into their profession, the bar repeatedly
called for more-restrictive admissions standards for law schools and

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240. *See* ABA Comm. on Professional Ethics, Formal Op. 302 (1961), *cited in* Hays, *supra*
note 226, at 165.
241. *Id.*
242. Contiguglia & Sorapure, *supra* note 131, at 684; *see also* Smith, *supra* note 203, at 31
(arguing that a young lawyer who charges too little would "cheapen the profession").
243. THE 1958 LAWYER, *supra* note 142, at 7.
244. *Id.*
245. Unterberger, *supra* note 142, at 40-41.

lower passage rates for bar exams.[246] For example, a 1958 article in the *A.B.A. Journal* noted that doctors' incomes increased faster than lawyers' incomes because doctors had limited entry: The number of doctors per capita had decreased from 1910 to 1955, while the number of lawyers per capita had increased.[247] The article concluded that licensing standards for lawyers should be raised:

> It is my conclusion, from a study of the available data, that the decline in the relative economic position of the legal profession is merely a symptom of a general failure on the part of the Bar to keep professional standards adjusted to the current needs and economic demands of society. The medical profession has surpassed the legal profession economically because it has continued to maintain and raise its standards. . . . The medical profession has higher standards than the legal profession for admission to professional school, for graduation from professional school, for admission to practice, for continuance in practice and for the handling of difficult and specialized cases in the practice.[248]

Responding to the ABA's exhortations, state and local bar associations began both to raise the fee levels in minimum fee schedules and to enforce the fee schedules more diligently.[249] The cartel succeeded, at least to some extent. Diligent use of fee schedules caused incomes to rise substantially, often by more than 25%.[250]

However, many consumers of legal services resisted the cartel. Savvy clients recognized that the bar had designed the fee schedules to rig the market for legal services, to coerce monopoly profits from clients. Clients resented the exploitation. For example, a 1955 manual on law practice noted why clients would resist enforcement of fee schedules: "[S]uch a schedule is open to public criticism because it has the appearance of monopoly. Clients and the public generally view such a published schedule with suspicion. It encourages the all too prevalent attitude of today that the lawyers have got together again to mulct their clients."[251] Not until 1975 did the Supreme Court hold that these fee schedules were illegal under the antitrust laws as horizontal price fixing.[252]

In figure 2, the impact of the fixed-fee cartel can be seen as a move from D to M. The cartel increased lawyers' incomes without changing the uncertainty that lawyers faced. Even with the higher

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246. *See* Loevinger, *supra* note 145, at 617, 701-02; *see also* Shepherd & Shepherd, *supra* note 61, at 2150.

247. *See* Loevinger, *supra* note 145, at 701-02.

248. *Id.*

249. *See, e.g.*, MACKINNON, *supra* note 72, at 17 ("[R]ecently, there has been a marked tendency toward revision and increase in use and enforcement of minimum fee schedules.").

250. *See* Robert I. Weil, *An Appraisal of State Fee Schedules*, 4 L. OFF. ECON. & MGMT. 439, 441 (1964).

251. MCCARTY *supra* note 64, at 95-96.

252. *See generally* Goldfarb v. Virginia State Bar, 421 U.S. 773 (1975).

fixed-fee levels, the income uncertainty from discovery remained. Wide variations in costs could still cause income per hour from a representation to be higher or lower than expected. Only the switch to hourly billing eliminated the income uncertainty.

E.   Except for Contingency Cases, the Profession Moves to Hourly Billing

Responding to the demands for hourly billing from both clients and lawyers, the profession, with the exception of personal injury cases, moved steadily toward hourly billing beginning in the late 1950s and early 1960s.[253] The two-decade time lag between the introduction of wide-ranging discovery in federal courts in 1938 and the widespread switch to hourly billing occurred for three reasons. First, the profession felt discovery's full economic force only after state courts adopted rules that copied the Federal Rules and permitted broad discovery. Until state courts permitted broad discovery, discovery's impact was confined to the minority of cases that proceeded in federal court. Only by the late 1950s and early 1960s had a substantial number of states adopted federal-style broad discovery.[254] The move to hourly billing began then. Only in the mid-1970s, after a majority of states had finally copied the federal discovery approach,[255] did hourly billing become the standard.

Second, the switch to hourly billing occurred with a lag because many lawyers in both federal and state courts learned to exploit discovery fully only after several years of experience with the new rules. The full extent that the new federal discovery rules would cause litigation costs and uncertainty to increase became clear only a decade or so after the rules' adoption.[256]

Third, the switch to hourly billing was delayed by fixed-fee billing's inertia. Clients and lawyers had used fixed fees for more than a century. Despite hourly billing's economic benefits, the weight of past practice caused clients and lawyers to embrace hourly billing carefully and slowly.

We now discuss how the move to hourly billing occurred in two stages. In the first stage, which lasted from the late 1950s until the late 1960s, the profession moved to an intermediate form of time billing, rather than to full hourly billing. In addition, in the first stage, the bar applied the intermediate time billing only to litigation, not to transactional work. Later, in stage two, the bar moved to full hourly billing, and did so for both litigation and transactional work. The change in

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253.   *See supra* text accompanying notes 180-81.
254.   *See supra* text accompanying notes 107-08.
255.   *See supra* text accompanying note 110.
256.   *See supra* Parts III.B, III.C.

billing practice for litigation cascaded into a change in billing practice for transactional work.

In stage one, the profession complied with the exhortations of the many books, articles, and seminars,[257] and began to use time-based billing. Before 1938, time-based billing was all but unheard of.[258] However, after the organized bar's efforts to promote it, time-based billing became increasingly common. For example, a survey in Maryland in 1961 showed that only 16% of the lawyers in Maryland always kept time records.[259] In 1968, the fraction had grown to 32%.[260] Similarly, during the same period, the fraction of Maryland lawyers who never kept time records fell from 33% to 15%.[261] Likewise, a national survey by the ABA in 1969 indicated that 83% of lawyers used time records "to a very great extent" when preparing a bill; 45% used time records all of the time.[262]

During stage one, the profession did not immediately move to pure hourly billing. Instead, lawyers and clients at first used the intermediate method that leading treatises and handbooks had suggested.[263] Until the late 1960s or early 1970s, most lawyers, in determining a bill, used hours spent as just one among several factors.[264] A leading law-practice handbook noted:

> No one, as far as the author knows, advocates fixing fees only on the basis of time spent. In the prior editions of this book, the basic time charge has long been advocated as determining the *cost*, and as a basis for considering what to charge the client. It has always been emphasized that it is only one of a number of elements in fixing the final fee.[265]

Another commentator noted, "[T]ime spent is admittedly not the only or the controlling factor in determining fees."[266] The ABA's 1969 national survey showed that 96% of lawyers took into consideration other factors, rather than time records alone, in fixing their bills. Only 4% used time alone.[267] During this period, lawyers interpreted Canon

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257. *See supra* Part III.D.

258. *See supra* note 66 and accompanying text.

259. *See* Miller, *supra* note 90, at 158-59.

260. *See id.*

261. *See id.*

262. *See* Joseph E. Roehl, *Survey of Timekeeping Techniques, in* STANDING COMM. ON ECON. OF LAW PRACTICE OF THE AM. BAR ASS'N, *supra* note 222, at 139, 151.

263. *See, e.g., supra* text accompanying notes 185-87 and *infra* text accompanying notes 265-69.

264. *See, e.g.,* Jay G. Foonberg, *The Short, Happy Life of Hourly Fee Billings, in* BEYOND THE BILLABLE HOUR, *supra* note 65, at 25, 27. For a review of much evidence that time was only one of many billing factors, see ROSS, *supra* note 2, at 19. "When attorney time-keeping first became common between the 1950s and early 1970s, most lawyers used time only as a starting point for the preparation of bills." *Id.*

265. McCARTY, *supra* note 64, at 90.

266. Ethel S. Barenbaum, *Attorneys' Fees—More Matter with Less Art—Part I,* PRACTICAL LAWYER, Dec. 1962, at 21, 41.

267. *See* Roehl, *supra* note 262, at 152.

12 of the Canons of Ethics,[268] which listed five other billing factors in addition to time, to prohibit billing based solely on hours. For example, in 1955, a leading law practice manual indicated, "The aim has been to make it plain that the final charge is to be fixed by considering all factors named in the Canons of Ethics, and that the time element is only one of these."[269]

Moreover, in stage one of the transition to hourly billing, the profession did not immediately adopt this intermediate time billing for all legal services. Instead, the switch to intermediate time billing first occurred only for litigation, not transactional work. Discovery had helped cause costs and uncertainty to increase for litigation, but not for transactional work. Thus, in the early 1960s, lawyers often billed transactional work by fixed fees, but used time-based billing for litigation. Many billing handbooks and primers from this period recommended that lawyers exclude litigation work from fixed-fee retainers that continued to cover transactional work; the bar recommended that lawyers continue to use fixed fees for all legal services except litigation and use intermediate time-based billing for litigation.[270]

In stage two of the transition, which occurred during the late 1960s and early 1970s, lawyers and clients both switched to the pure version of hourly billing and applied hourly billing to all legal work, not just litigation.[271] A history of the legal profession during the period notes that, although the use of hourly billing began in the 1960s, "the shift from retainers and other non-time-based billing was not completed until the 1970s. Previously firms had determined their fees using imprecise formulas, often charging more when the results of their efforts were especially good."[272] Thus, "[d]uring the late sixties and early seventies, most major firms started charging for their services based on the amount of time spent by the firm's lawyers on a project."[273] A 1972 primer on billing practices recommended that time continue to be only one factor in determining a fee. However, the primer noted, "There has been a trend over the last several years to bill for legal services on a pure time basis."[274] By 1978, a national survey of billing practices showed that almost all lawyers, except for those billing on contingency, were billing purely by the hour.[275] During the 1980s and 1990s, except for cases that are litigated on contin-

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268. *See* AMERICAN BAR ASS'N, CANONS OF PROFESSIONAL AND JUDICIAL ETHICS, OPINIONS OF COMMITTEE ON PROFESSIONAL ETHICS AND GRIEVANCES 10-11 (1957).

269. MCCARTY, *supra* note 64, at 90; *see also* THE 1958 LAWYER, *supra* note 142, at 18; Gerhart, *supra* note 71, at 240.

270. *See supra* text accompanying notes 185-88.

271. *See also* ROSS, *supra* note 2, at 18 ("The number of attorneys who billed by the hour increased sharply during the 1960s.").

272. TROTTER, *supra* note 64, at 28.

273. *Id.* at 27.

274. Miller, *supra* note 90, at 162.

275. *Cf.* D. W. Darby, Jr., *It's About Time: A Survey of Lawyers' Timekeeping Practices,* LEGAL ECON., Fall 1978, at 39.

gency, the pervasive billing method for both transactional work and litigation has been hourly billing.[276]

In three ways, the success of hourly billing for litigation may have caused the profession, at least to some degree, to cascade into hourly billing for transactional work. First, because of the coincidence that hourly billing was adopted for litigation at the same time that lawyers' incomes increased, lawyers believed that hourly billing increased lawyers' incomes—although a large part of the increase probably resulted instead from society's increasing complexity.[277] Hourly billing seemed to promise similar increases in income for transactional work. Second, efficiency concerns might have induced law firms to choose one billing method for all of their legal services, both transactional work and litigation. It might be cheaper for a law firm to administer hourly billing practices for all of its legal services, rather than to use hourly billing for litigation and fixed-fee billing for transactional work. Because hourly billing had become efficient for litigation, firms had little choice but to switch to hourly billing for all of their services. Third, because some clients may have found hourly billing easier to understand and to manage, the clients demanded hourly billing for both litigation and transactional work.[278]

However, a more important cause of the switch to hourly billing for transactional work was society's increasing complexity. During the 1960s and 1970s, when most of the switch to hourly billing actually occurred for transactional work, the amount and complexity of legal regulation increased dramatically. The United States experienced an explosion in the number of statutes, regulatory agencies, and rules.[279] The new complexity created a large new demand for lawyers' services: During the period, the resources that the United States devoted to legal services more than doubled in real terms.[280]

Our model demonstrates that a switch from fixed-fee billing to hourly billing will become efficient if cost uncertainty increases. The introduction of broad discovery created the cost uncertainty that led to the call for hourly billing for litigation in the late 1950s. Similarly, by the late 1960s, society's increasing social, political, and legal complexity had caused an increase in cost uncertainty for transactional work. Before the increase in complexity, the cost of performing a given transactional task would have been relatively certain. For example, a lawyer could have predicted with relative accuracy how many

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276. Although hourly billing has been the standard fee arrangement for approximately two decades, the profession is now experimenting with other approaches. *See generally* BEYOND THE BILLABLE HOUR, *supra* note 65.

277. *See infra* text accompanying notes 279-80.

278. *See supra* note 209.

279. *See* GALANTER & PALAY, *supra* note 61, at 41-44.

280. *See id.* at 40.

lawyer hours would be required to draft an agreement for the sale of a block of commercial real estate.

However, after the increase in complexity, the prediction would be less certain. The lawyer would not know without further investigation whether the client's circumstances would require sophisticated tax planning to exploit the increasingly complex tax code. The lawyer would not know whether the sale would implicate new environmental statutes and regulations—whether, for example, the contract might require an environmental impact statement. Just as the introduction of broad discovery caused cost uncertainty that pushed the profession toward hourly billing for litigation, society's new complexity caused cost uncertainty that, a decade later, pushed the profession toward hourly billing for transactional work.

Society's increasing complexity also reinforced the profession's movement to hourly billing for litigation work. Broad discovery had increased uncertainty about the cost of litigating a case, spurring the movement toward hourly billing to begin in the late 1950s. By the late 1960s, the same increases in complexity that helped to propel the profession to hourly billing for transactional work had exacerbated cost uncertainty for litigation. In the mid-1950s, litigation costs were uncertain primarily because a litigator could not accurately predict the amount of discovery that would occur. In the late 1960s, cost prediction was even more uncertain because the litigator could not foresee the degree to which the country's complex new statutes, regulations, and regulatory framework would extend the case.

For example, suppose that, in the late 1960s, a law firm was considering a corporation's request to defend the corporation in its employment litigation. The law firm would not know in advance whether any given law suit would involve only simple claims for breach of the employment contract, as such a suit would have thirty years earlier. Instead, the suit might now involve claims under a network of state and federal statutes that prohibit discrimination based on sex, race, and age. The complicated new regulatory framework would make the law firm even less willing than before to accept the representation under a fixed fee.

One of the bar's arguments to convince lawyers to switch to hourly billing was that hourly billing appeared to increase lawyers' incomes. The profession's later history seemed to confirm the claim. At the same time that the profession switched to hourly billing in the 1960s and early 1970s, lawyers' incomes increased strongly. For example, income for partners at law firms more than tripled.[281]

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281. After falling in real terms for two decades, lawyers' incomes began to soar during the 1960s. For example, between 1957 and 1976, income for law firm partners increased from $16,480 to $55,510, far ahead of the inflation rate. *See* ABEL, *supra* note 90, at 302 tbl.38.

That the switch to hourly billing occurred at the same time as the increase in lawyers' incomes is probably mainly a coincidence. A primary cause of the rising incomes was that the increase in society's complexity caused a large increase in demand for lawyers. Lawyers became more valuable as guides through the complicated new world of legal complexity and high-stakes litigation. Their pay increased accordingly.

Indeed, instead of causing lawyers' incomes to increase, the move to hourly billing probably restrained legal incomes below the levels that they would otherwise have achieved. Our economic model suggests that the switch to hourly billing would have been accompanied by a reduction in lawyers' incomes below the level to which the incomes would otherwise have risen; clients would agree to hourly billing only in exchange for a reduction in expected legal fees.[282] Absent hourly billing, market forces would have required clients to compensate lawyers for the additional risk that fixed-fee contracts created; lawyers had indicated that they charged substantially more—often 25% more—to complete a legal task under a fixed-fee agreement than under hourly billing.[283]

Hourly billing may deserve neither its reputation among some lawyers as an income-increasing hero nor its reputation among some critics as a villain that caused sharp increases in wasteful legal expenses. The increasing complexity of both society and the law was probably more responsible for the increases in lawyers' fees. Hourly billing probably restrained the increase. Otherwise, clients would not have agreed to switch to hourly billing.

Figure 2 tracks the impact on the profession of the fee-schedule cartels, the switch to hourly billing, and society's increasing complexity. Although the fee-schedule cartels and rising social and legal complexity helped lawyers' incomes to increase substantially, the shift to hourly billing probably limited the increase. Absent the fee cartels and the increase in complexity, the switch to hourly billing, from point D to N, would have resulted in a decline in lawyers' income; clients would have demanded the decline in order to agree to the switch. The fee cartels and the increase in society's complexity then caused the profession to move from N to I, with sharply higher incomes for lawyers. However, without hourly billing, the increase in income might have been even larger.

Our theoretical model helps to explain why personal injury cases remain an exception to the movement to hourly billing; the model helps to explain why many personal injury cases continue to be litigated under contingency fee agreements, which are a form of fixed-fee contract. Others have noted that contingency agreements are efficient

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282. *See supra* Part II.D.4.
283. *See supra* text accompanying notes 201-02.

for representation of individuals because they permit a lawyer, in effect, to advance attorneys' fees to a client with few assets.[284] This is one possible reason that contingency lawyers and their clients did not switch to hourly billing.

Our model offers an additional explanation. The model shows that an increase in cost uncertainty will create incentives for a switch from fixed-fee billing to hourly billing only if the lawyer is more risk averse than the client.[285] In contrast, if the client is the more risk averse of the two, then an increase in uncertainty creates a strong incentive for client and lawyer to remain with the fixed-fee contract.[286]

Because institutional clients tended to be less risk averse than their lawyers,[287] increased uncertainty caused a switch to hourly billing for these clients. However, individuals are often much more risk averse than institutions. This is especially so for personal-injury plaintiffs who have suffered injuries that may have depleted their assets. Unexpectedly high litigation costs might force such a plaintiff into bankruptcy. For these clients, the contingency agreement is optimal because it transfers risk from the risk-averse clients to their less risk-averse lawyers. The more cost uncertainty that discovery created, the more efficient that contingency agreements became for these clients. The more risk that existed, the more that the contingency agreement benefited risk-averse clients by rescuing them from the risk.

F. Wide-Open Discovery Limits Access to Legal Services

By increasing litigation's costs and the costs' uncertainty, wide-open discovery has restricted access to legal services. Both the increase in litigation costs and the increased uncertainty raise the effective price of litigating a case. Looking first at litigation costs, the increase in these costs increases the price of litigation regardless of the fee arrangement. For a client who has hired a lawyer under an hourly fee agreement, wide-open discovery has substantially increased the number of hours for which the client will expect to pay for litigating the case. For a client who has hired a lawyer under a fixed-fee agreement, discovery has substantially increased the size of the fixed fee that the lawyer will charge; wide-open discovery will cause the size of fixed fees to rise because, in a competitive market for legal services, lawyers will remain in the market in the long run only if the fixed fees rise to cover the lawyers' increased costs from discovery.

Likewise, the increased uncertainty increased the effective cost of litigation services. Again, this was true regardless of the fee arrangement. Under an hourly agreement, the new uncertainty increased the

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284. *See, e.g.,* POSNER, *supra* note 35, at 624.
285. *See supra* Part II.D.4.
286. *See supra* Part II.D.4.
287. *See supra* text accompanying notes 35-36.

client's risk. Discovery caused the client to be less certain about whether litigation costs would be large or small. For a risk-averse client, the increased uncertainty was equivalent to an increase in price; the client would have been willing to pay extra to reduce the uncertainty. Similarly, under a fixed-fee agreement, the increased risk from discovery was, to a risk-averse attorney, identical to any other increased cost. In a competitive market, fixed fees would rise to cover the new cost.

The increase in litigation's effective price made litigation unaffordable for many people and companies. By increasing litigation's costs, broad discovery effectively denied them recourse to lawyers, the courts, and justice.

This was true for both potential plaintiffs and defendants. Discovery's expense and uncertainty prevented some plaintiffs from asserting valid claims. For example, a plaintiff who, before the introduction of wide-open discovery, might have sued her landlord for illegally failing to maintain her apartment now may be unable to afford to sue. Under hourly billing, the potential plaintiff expects even this small case to require a prohibitive number of expensive hours of attorney time, many for discovery. Moreover, although the case might settle quicker than expected, a substantial possibility exists that litigation costs would explode, draining the plaintiff's assets. Unable to bear discovery's expense or risk, the potential plaintiff cannot assert her rights. Similarly, the plaintiff is unable to obtain representation at an affordable fixed fee because discovery has increased both the expected cost and the cost uncertainty that attorneys' fixed fees must cover. If fixed-fee representation is available, its price is prohibitive.

Conversely, the cost and uncertainty of discovery prevented some defendants from obtaining representation to defend against invalid claims. Some defendants settle even invalid claims for substantial sums because the settlement sums are cheaper than the large new costs that discovery imposes.

Wide-open discovery tends to deny justice to some of society's most vulnerable groups. Those with the least wealth are least able to pay the higher costs for litigation. Moreover, wide-open discovery increases litigation's effective cost most for those who are the most risk averse, and who are thus most sensitive to the risk from discovery. These tend to be small businesses and individuals with few assets, for whom the risk of an unexpectedly large legal bill is unbearable.[288] In contrast, large corporations and wealthy individuals tend to be less risk averse. In this sense, wide-open discovery weights the scales of

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288. In some situations, law firms absorb the risk for these groups by means of fixed-fee contracts, such as contingency agreements. However, in many situations, only hourly arrangements are available.

justice against poor individuals and small businesses and in favor of large corporations and the wealthy.

IV. CONCLUSION

The expansion of discovery in the 1938 Federal Rules of Civil Procedure played a substantial role in leading the legal profession to switch from fixed-fee billing to hourly billing for all but contingency cases. A theoretical economic model and historical evidence suggest that if litigation costs are relatively certain, then the efficient contract for legal services is a fixed-fee contract. Although the fixed-fee contract imposes some cost risk on attorneys, the contract reduces moral hazard: The contract eliminates any incentive for the lawyer to waste time.

In contrast, if cost uncertainty increases greatly and lawyers are more risk averse than their clients, then it will be efficient for the lawyer and client to switch to hourly billing. Hourly billing will reduce costly risk for the attorney, so that the attorney can pass along some of the savings to the client. Hourly billing will create an incentive for the lawyer to devote excess time to the case. However, if cost uncertainty increases sufficiently, then the savings from the risk reapportionment will more than offset the cost of the waste from the moral hazard. Fixed-fee billing will remain optimal only for those lawyers, such as contingency lawyers, who are less risk averse than their clients.

The theoretical model helps to explain the shift from fixed-fee billing to hourly billing in the years after the Federal Rules expanded discovery in 1938. Before 1938, the standard fee arrangement was the fixed-fee contract or a variant of it. Broadened discovery then increased the uncertainty of litigation costs. The uncertainty deepened further as states, copying the Federal Rules, began to adopt broad discovery over the next two decades.

In the mid-1950s, the profession acted. As our model predicts, litigators and clients switched to hourly billing in order to reduce the litigators' cost uncertainty. Because hourly billing efficiently distributed the new uncertainty from discovery, both lawyers and institutional clients sought the change to hourly billing.

The profession initially switched to hourly billing only for litigation, not for transactional work. However, by the late 1960s, society's increasing complexity had increased cost uncertainty for transactional lawyers. As our model predicts, the bar soon shifted to hourly billing for transactional work. By 1978, except for contingency representations, the profession had moved to hourly billing for all legal services, a system that continues to the present. Our model explains that many personal injury cases continue to be litigated under contingency agreements in part because clients in these cases are often more risk averse

than clients in other cases. Hourly billing is not optimal for cases in which the client is more risk averse than the lawyer.

Although lawyers' incomes increased rapidly at the same time that lawyers switched to hourly billing, our model suggests that hourly billing probably did not cause the increase. Instead, it appears that lawyers' incomes increased because society's increasing complexity made lawyers more valuable. In fact, hourly billing probably reduced the increase's size.

The model helps to explain why clients and lawyers have, during the last decade, experimented again with various forms of fixed-fee billing.[289] The model shows that hourly billing is optimal only when the lawyer is more risk averse than the client and when little danger exists that the lawyer will be disloyal to the client. Under these conditions, hourly billing distributes risk efficiently away from the lawyer, while the lawyer's loyalty assures that the lawyer will respond little to hourly billing's incentive to pad the bill.[290] These conditions existed in the 1960s and early 1970s, when the profession moved to hourly billing. Because law firms were small,[291] they probably feared risk more than their large institutional clients. In addition, a tradition of trust, civility, and loyalty may have pervaded much of the profession.[292]

In recent years, these conditions may have changed. Many law firms are now an order of magnitude larger than the biggest firms of thirty years ago.[293] Complaints about a decline in trust and loyalty are now common.[294] Thus, our model indicates that hourly billing may no longer be optimal. Hourly billing now creates both fewer benefits and greater harms than before.

Hourly billing now creates fewer benefits because it is no longer needed to shift cost uncertainty away from lawyers. A large law firm can bear the risk from a fixed-fee agreement as well as a large client can bear the risk from hourly billing. Hourly billing creates cost uncertainty for the client. A large client reduces this risk by diversifying it across the many cases that it litigates. Although a few cases may be unexpectedly expensive to litigate, the cost for all of the cases grouped together will be predictable. Likewise, a large law firm could now diversify the risk that many clients with fixed-fee contracts would create. Although the law firm would lose money on some of the contracts and

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289. *See, e.g.*, BEYOND THE BILLABLE HOUR, *supra* note 65; Margaret C. Fisk, *Corporate Firms Try Contingency*, NAT'L L.J., Oct. 27, 1997, at A1; Jill S. Chanen, *Constructing Team Spirit*, A.B.A. J., Aug. 1997, at 58, 59.

290. *See supra* Part II.D.

291. *See supra* text accompanying notes 69-70.

292. *See, e.g.*, GALANTER & PALAY, *supra* note 61, at 32-36; GLENDON, *supra* note 61, at 17-39; KRONMAN, *supra* note 61, at 291-92.

293. *See, e.g.*, GALANTER & PALAY, *supra* note 61, at 46-48; KRONMAN, *supra* note 61, at 274-75.

294. *See, e.g.*, GALANTER & PALAY, *supra* note 61, at 32-36; GLENDON, *supra* note 61, at 17-39; KRONMAN, *supra* note 61, at 291-92.

receive windfalls on others, profits would be predictable and secure when the cases were grouped together.

Hourly billing now creates greater harm because the moral hazard from hourly billing now creates greater costs. Lawyers' purportedly declining loyalty suggests that they may now succumb more often to incentives from hourly billing to pad their bills.[295]

Finally, because the introduction of broad discovery increased the effective price of litigating a case, discovery made litigation unaffordable for some people. Discovery both increased litigation's expected costs directly and also effectively increased costs further by increasing cost uncertainty. Broad discovery thus effectively denied to some of society's most vulnerable groups recourse to lawyers and the courts, weighting the scales of justice against them.

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295. For recent survey results showing that many lawyers charge their clients for more hours than they actually worked, see Lisa G. Lerman, *Lying to Clients*, 138 U. PA. L. REV. 659, 706-20 (1990).

MATHEMATICAL APPENDIX:
A MODEL OF RISK, MORAL HAZARD, AND THE OPTIMAL
CONTRACT

A. Introduction

We here develop a model of how the interaction of risk bearing, moral hazard, and other factors determines the optimal contract type.

We have described in the main text the fixed-fee contract, the hourly/cost-plus-percentage contract, and the cost-plus-fixed-fee contract. We now express each type of contract in technical terms. The fixed-fee contract would simply offer a fixed payment of amount K.

We have seen that an hourly billing contract is identical to a cost-plus-percentage contract for suppliers of military equipment to the government: As with a military supplier, the client effectively agrees to reimburse the lawyer's costs, including the opportunity cost of the lawyer's time, plus an additional percentage of the costs.[296] For the cost-plus-percentage supply contract, suppose that P is the fraction of any additional costs that the supplier pays. Then, $1 - P$ is the reimbursement fraction, the fraction of additional costs that the buyer reimburses. The supplier's fee is

$$(1 - P)X$$

where X is the supplier's costs and P is a negative number. The negative P indicates that the supplier paid a negative fraction of any additional cost amount. That is, the supplier not only paid none of the additional costs and received full reimbursement for them, but the supplier also received payment of an additional profit fraction of the costs that the supplier incurred.[297] The profit fraction was $-P$. For example, the goverment might pay the supplier 1.2 times the supplier's costs, so that $P = -.2$ and $1 - P = 1.2$.

Identically, a lawyer's hourly fee H in a competitive market reimburses the lawyer for her costs C for the hour plus a percentage profit at the market profit rate. Thus, $H = (1 - P)C$, where $-P$ is the lawyer's profit margin on its costs. If the lawyer devotes N billable hours to litigating a case, then the lawyer's total fee for the case will be $NH = N(1 - P)C$. But because NC is the lawyer's total cost X for litigating the case, the lawyer's fee is, equivalently, $(1 - P)X$. This is identical to the cost-plus-percentage contract.

A cost-plus-fixed-fee contract for legal services would be different. Unlike for the hourly contract where the lawyer's profit varies with the lawyer's costs, the additional amount that the cost-plus-fixed-fee contract would offer would remain the same regardless of the lawyer's costs. That is, under the cost-plus-fixed-fee contract, the lawyer

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296. *See supra* text accompanying notes 31-32.
297. *See* SCHERER, *supra* note 24, at 140-41.

would receive an amount $NC + K$, where NC is the lawyer's total litigation cost and K is the fixed additional profit amount.

In addition, a client and lawyer could choose a contract that is between the fixed-fee contract and the two other contract types. They might choose a contract that pays the lawyer a moderate fixed fee K plus a percentage of the lawyer's costs, but not the lawyer's full costs. The lawyer would receive $N(1 - P)C + K$, where P is a fraction that is less than one. For example, for litigating a case, the lawyer might receive a fixed payment of $21,000 plus 25% of the lawyer's hourly costs for each hour that the lawyer works; the lawyer would absorb the remaining 75%. That is, $P = .75$ and $1 - P = .25$. Suppose that the lawyer's normal hourly fee was $250 per hour, her hourly costs were $200 per hour, and she worked 100 hours on the case. Then the lawyer's fee would be $26,000 = 100(.25)($200) + $21,000$. Another way of looking at this fee arrangement is that the lawyer would receive a fixed fee plus 20% of her normal hourly fee.

The amount that the lawyer receives under an intermediate contract could be less or more than the lawyer would receive under a normal hourly contract. The size of the lawyer's payment depends on the sizes both of the fixed payment K and of the reimbursement fraction $1 - P$. For example, under the intermediate contract in the previous paragraph, the $26,000 that the lawyer receives exceeds the $25,000 that the lawyer would have received if the lawyer had worked for the same 100 hours at her normal hourly rate of $250 per hour.

Such intermediate contracts have often been used in government procurement. The government will pay a supplier a fixed fee. In addition, the government will reimburse the supplier for a fraction of its costs.[298] The reimbursement fraction's size can be large or small. Such contracts are sometimes known as "fixed-price incentive contracts" or "fixed-fee incentive contracts."[299] This is because such a contract provides the supplier with both a fixed fee and an incentive to reduce costs; because the government reimburses only part of additional costs that the supplier incurs, the supplier has an incentive to reduce costs as much as possible.

B. A General Framework

For all three types of contracts—fixed-fee, hourly, and intermediate—the payment that the lawyer receives can be represented as:
$$N(1 - P)C + K. \qquad (1)$$
For the fixed-fee contract, $P = 1$, so that the amount that the lawyer receives is $N(1 - 1)C + K = K$. The lawyer receives a fixed amount K, but absorbs any additional costs that she incurs, including the cost of her time, and she is not reimbursed for the costs.

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298. *See id.* at 134-37.
299. *See generally id.* at 134.

For the hourly contract, $K = 0$ and $P < 0$. The lawyer receives $N(1 - P)C + 0 = N(1 - P)C$. The lawyer receives no fixed payment. Instead, the lawyer absorbs none of the additional costs that she incurs. In addition, for each hour that the lawyer devotes to the case, the client pays the lawyer the lawyer's hourly cost plus an additional profit percentage.

For the cost-plus-fixed-fee contract, $K > 0$ and $P = 0$, with the lawyer's fee being $N(1 - 0)C + K = NC + K$. The contract completely reimburses the lawyer's costs NC and provides an additional fixed amount K for profit.

For the fixed-fee incentive contract, $K > 0$ and $1 > P > 0$. The lawyer receives $N(1 - P)C + K$, which is a fixed cash payment plus partial reimbursement of her hourly costs. The unreimbursed fraction of the costs is P.

In a competitive market for legal services, the size of the fixed payment K will depend completely on the size of the reimbursement fraction P. Suppose that a client is shopping for a lawyer to litigate a case and that the client announces that he will pay whichever lawyer he chooses $40 per hour plus a fixed fee. Assuming that the lawyer's costs are $200 per hour, the reimbursement fraction $1 - P$ is .2. No lawyer will accept this employment unless the fixed fee covers her costs, including a reasonable profit. In a competitive market, a number of lawyers will seek the contract, and they will bid the fixed fee down to an amount that just covers costs and a reasonable profit. Thus, for this reimbursement fraction of .2, the market will determine a unique additional fixed fee that the client will pay. No lawyer will do the work for less. And a competitive market will ensure that the client need not pay more.

There will be an inverse relationship between the reimbursement fraction and the fixed payment. The greater the fraction of the lawyer's costs that the client reimburses, the lower the fixed fee that the client will need to pay.

C.   A Model of a Law Firm's Behavior

Suppose that a law firm, or one or more lawyers, has agreed with a client to litigate a case.[300] As before, C is the firm's cost per hour of time worked and N is the number of hours that are required to litigate the case. The firm may choose to devote its resources either to this case or to other cases. Total profits from all of the firm's cases other than this case are defined as Q.

Assume that the client and law firm agree on a contract such as that in equation (1),[301] so that the client will pay the firm a fixed fee

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300.   The analysis applies with equal force to a law firm or an individual lawyer or lawyers.
301.   Recall that equation (1) provides that the compensation that the law firm receives can be represented as $N(1 - P)C + K$.

K, which could range from zero to any positive amount, plus an hourly fee that is an agreed fraction $1 - P$ of the firm's hourly costs C. The client and firm arrived at this arrangement by negotiation or by competitive bidding.[302]

Because the payment that the firm receives for the case is $N(1 - P)C + K$, the firm's total profit, for this case and all others, is the payment for the case minus the firm's cost for the case plus profit from all other cases:

$$\pi = N(1 - P)C + K - NC + Q. \tag{2}$$

This can be rewritten as:

$$\pi = K - PNC + Q. \tag{3}$$

The fraction P can be understood as the amount that the law firm pays for each additional dollar of cost that the firm devotes to the case. The client reimburses the fraction $1 - P$ of the firm's total hourly costs NC; the firm must bear fraction P.

We assume that there is a direct relationship between the maximum attainable Q and NC; lower profits in other cases will lead to lower costs and higher profits in this case. Any nonreimbursable expenses that the firm devotes to cost reduction in the case reduce its profits from other cases by an equal amount; the firm can choose either to invest its profits from other cases in cost reduction in this case or to distribute its profits to its partners.[303] However, the investment will lead to lower costs in the case, lowering PNC. This relationship can be represented as

$$Q = F(NC) \tag{4}$$

where F is a function that indicates the maximum attainable profit in all other cases for a given level of costs in this case. That is, if the firm sacrifices some profits in other cases, it can reduce costs in this case; lower Q will be associated with lower NC.

The firm will attempt to invest an optimal amount in cost reduction to maximize its profits. Looking at equation (3), because K is fixed, the firm will attempt to maximize $Q - PNC$, the difference between profits in other cases and the costs that the firm must bear from this case. That is, the firm will transfer an additional amount from profits to cost-saving efforts as long as the firm's expected cost savings exceed the transferred amount. For example, suppose that the firm has agreed to a fixed-fee contract such that P is 1.0; in exchange for a fixed payment, the law firm agrees to pay all of the firm's hourly costs,

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302. For simplicity, the model assumes that the required quality of representation is fixed and observable. The issue to be decided is whether the representation will be offered at the lowest possible total cost, including risk-bearing cost.

303. This analysis mirrors the model of procurement contracting in Weitzman, *supra* note 24, at 719. This model also is related to models of optimal income taxation and optimal insurance contracts. *See, e.g.*, J. A. Mirrlees, *An Exploration in the Theory of Optimum Income Taxation*, 38 REV. ECON. STUD. 175 (1971); J. A. Mirrlees, *Optimal Tax Theory: A Synthesis*, 6 J. PUB. ECON. 327 (1976); Michael Spence & Richard Zeckhauser, *Insurance, Information, and Individual Action*, 61 AM. ECON. REV. 380 (1971).

and the client pays none of them. The firm will invest $100 if it causes its expected total hourly costs NC to decline by $101, yielding gross savings to the firm of the full $101 = 1.0 × $101, for a net saving of $1, when the $100 cost is considered. In contrast, the firm will not make the $100 investment either if its cost savings will be only $90 (the firm would suffer a $10 loss on the investment) or if cost savings will be $500 but the firm's cost fraction P is a lower 10% (so that the firm's savings are only $50).

Because, under equation (4), Q is a function of NC, it can be shown[304] that the firm will have maximized profits when

$$\frac{\partial Q}{\partial CN} = P, \tag{5}$$

or equivalently,

$$Q_P^l - PCN_P^l = 0, \tag{6}$$

where Q_P^l and N_P^l are the partial derivatives of Q and N with respect to P.[305] This means that the law firm maximizes profits at a point where it could reduce costs by a unit by giving up only a fraction P of a unit of profit. The law firm does not invest an additional unit of profit in cost saving efforts unless that unit yields a greater $\frac{1}{P}$ units of cost savings. For example, if P is .25, the law firm would not invest an additional unit to reduce costs unless the unit reduced costs by more than four units. This is because the client is reimbursing 75% of all costs; a reduction in costs of four units reduces the costs that the firm pays by only one unit. The firm will be unwilling to devote a unit of profit to cost reduction, even if the unit will reduce total costs by three units.

Whenever $P < 1$, the contract creates inefficiency. If $P < 1$, the firm has an incentive not to spend an amount on cost reduction even if the investment would reduce total costs by a much larger amount. Waste occurs. Society loses, as does the client. The law firm's contract creates moral hazard that induces the firm to behave in ways that harm both the client and society. As we will see, the client and law firm agree to the contract despite this inefficiency in order to reduce the risk that the law firm would otherwise bear. The client and firm permit some waste to occur in order to reduce risk-bearing costs.

D. The Efficient Contract

At the time that the client and law firm negotiate the contract and decide the fixed payment K and cost-sharing fraction P, the firm's costs for litigating the case are uncertain. Although the firm can esti-

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304. The first order condition is established by differentiating with respect to NC.

305. $\frac{\partial Q}{\partial CN} = P$, yields $\partial Q = CP\partial N$. Dividing both sides by ∂P, and rearranging, produces $Q_P^l - PCN_P^l = 0$.

mate the number of hours that it will need to devote to the case, the estimate will be imperfect. The number of hours may turn out to be higher or lower than expected. Accordingly, both the client and firm, when negotiating the contract, seek to maximize their expected utility levels. Suppose that $V(.)$ is the client's utility function and $U(.)$ is the firm's utility ·function. For example, $V(.)$ indicates the client's happiness level for a given state of the world, including how much money the client receives. If E indicates expected value, the client will attempt to negotiate so as to maximize his expected utility $EV(.)$. The firm will attempt to maximize its expected utility $EU(.)$.

A contract will be efficient only if it is Pareto optimal: It will be efficient only if changing the contract's terms to increase the client's expected utility will decrease the firm's expected utility, and vice versa. The contract is Pareto *in*efficient if K and P could be renegotiated to make both the client and firm better off; the contract is wasteful because both client and firm could be made better off by changing the contract's terms. Another way to say the same thing is the following.

Suppose that the client and firm agree that the contract will permit the firm to achieve a given level of expected utility U^*. The client and firm can negotiate U^* fiercely; the negotiated level may depend on ·bargaining power and bargaining skill. Once the client and firm have agreed that the firm will receive expected utility U^*, the firm will be indifferent among various combinations of K and P that provide it with U^*. As long as the contract gives it U^*, the firm will be indifferent between a contract that provides it a large fixed payment but no reimbursement of costs, and a contract that provides it with no fixed payment but more-than-full reimbursement of costs.

An efficient contract will maximize the client's expected utility given that the firm receives expected utility U^*. The client and firm would be throwing money away if they agreed to a contract that gave the ·firm U^*, but did not give the client as high as possible expected utility given the firm's U^*. By definition, if a contract were inefficient in this way, the client and firm could alter the contract's terms K and P to make the client better off and the firm no worse off. Indeed, to induce the firm to agree to renegotiate the contract to achieve Pareto efficiency, the client could offer to pay the firm to permit the renegotiation. Unless a contract is Pareto optimal, both the client and the firm could be made better off by changing the contract's terms.

Thus, the efficient contract is the solution to the problem

$$max_{K,P}EV[-N_P(1 - P)C - K], \tag{7}$$

subject to both

$$EU[K - PN_PC + Q_P] = U^* \tag{8}$$

and, repeating the condition for the firm's optimal behavior from equation (5) above,

$$\frac{\partial Q}{\partial CN} = P, \tag{9}$$

where the notation in equation (7) indicates that (7) is maximized by adjusting the values of K and P. The subscript in N_P indicates that the number of hours that the firm's lawyers will choose to work will depend on how much the client pays the firm for each additional hour that the attorneys work on the case. The subscript in Q_P notes that the amount that the firm will devote to reducing cost will depend on the fraction of the cost that the firm bears.

Equation (7) indicates that the client seeks to maximize the expected utility of the payments that he must make to the firm; that is, the client seeks to minimize the pain from the payments. But the client must do this while at the same time maintaining the firm at the expected utility level U^*.

E. Determining the Optimal Cost-Sharing Fraction

The solution to equations (7)-(9) will determine the conditions under which a fixed-fee contract is optimal and the conditions under which an hourly contract is best. The solution to the equations will determine the optimal cost-sharing fraction P^*. In addition, as equation (8) shows, the P^* that is determined will also necessarily determine the optimal fixed payment K^*. This is because the client's expected cost-sharing payments to the law firm will establish exactly what additional fixed payment is needed to achieve the firm's necessary expected utility level U^*. If the optimal P^* is large, so that the firm receives only small—or no—payments for each additional hour of work, then the fixed payment will be large, in order to bring the firm's utility level up to U^*. That is, when P^* is large, then a contract approaching a fixed-fee contract will be optimal.[306] In contrast, if P^* is

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306. If $P^* \geq 1$, then the optimal contract is a fixed-fee contract. Even if $P^* > 1$, the optimal contract is a fixed-fee contract and not a contract in which the lawyer absorbs an amount that exceeds the amount of additional costs. This is because a contract under which the attorney must pay more than his costs is never optimal, and a rational client and lawyer will never choose such a contract. Under such a contract in which $P > 1$, the lawyer would pay all of each additional unit of cost, plus a further percentage. For example, suppose that $P = 1.25$. If the lawyer incurred an additional cost of $100, then the lawyer would receive no reimbursement of it from the client. Instead, the lawyer would not only absorb the full $100 cost, but also pay an additional $25.

If the contract specified that the additional $25 went to the client, then the contract would be inefficient. Suppose that eliminating the $100 cost would require the lawyer to spend $120. Spending this amount to eliminate the cost would be inefficient; the lawyer would be devoting $120 of resources to win only $100 of resources, for a loss of $20 to society. But the contract would induce the lawyer to make the expenditure. By making the $120 expenditure, the lawyer saves not only the $100 but also the $25 additional amount that the lawyer would otherwise pay the client.

If the contract specified that the additional $25 went not to the client, but to the supplier of the $100 input, then the contract would be inefficient for two additional reasons. First, to cover the cost either of the additional $25 or of the cost of avoiding the $25, the lawyer would need to increase the price that she demanded from the client; in a competitive market, without the price

small so that the firm receives large hourly payments, then the fixed payments will be small. If, as in normal hourly billing, $P*$ is negative so that the firm receives large hourly payments that include a profit amount beyond costs, then $K*$ will be zero; the firm will receive a large payment per hour of work, but no fixed payment. That is, when the optimal $P*$ that we derive is very small, an hourly contract will be optimal.

Because the optimal fixed payment is a function of the optimal sharing fraction, equation (8) becomes

$$EU[K_P - PN_PC + Q_P] = U*. \tag{10}$$

Differentiating both sides of equation (10) with respect to P yields the equality

$$E[K_P^l - N_PC - PN_P^lC + Q_P^l]U^l = 0. \tag{11}$$

However, because equation (6) shows that the last two terms sum to zero, equation (11) can be rewritten as

$$K_P^l = \frac{ECN_PU^l}{EU^l.} \tag{12}$$

Because K_P is determined by equation (10), with equation (9) determining N_P and Q_P, the problem in equations (7)-(9) boils down to

$$max_PEV[-N_P(1 - P)C - K_P]. \tag{13}$$

To determine the optimal value $P*$ that maximizes equation (13), we differentiate the equation with respect to P, yielding the first order condition

$$E[N_{P*}C - N_{P*}^l(1 - P*)C - K_{P*}^l]V^l = 0. \tag{14}$$

Substituting from equation (12) yields

$$ENCV^l - (1 - P*)EN^lCV^l - \frac{EV^lECN_PU^l}{EU^l} = 0. \tag{15}$$

We create the following definitions:

$$\bar{X}_U = \frac{ECNU^l}{EU^l} \tag{16}$$

$$\bar{X}_V = \frac{ECNV^l}{EV^l} \tag{17}$$

$$\bar{X}_V^l = \frac{ECN^lV^l}{EV^l} \tag{18}$$

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increase, the lawyer would be operating at a loss and would go out of business. The lawyer's services would then be inefficiently priced above their true marginal cost. Second, the lawyer would be paying the supplier of the input an amount higher than the supplier's marginal cost, distorting the supplier's output decision and causing excess output.

$$\tilde{e} = \frac{-P\bar{X}_V^I}{\bar{X}_{V.}} \tag{19}$$

Substitution of equations (16)-(19) into (15) yields an expression for the optimum cost-sharing fraction:[307]

$$P* = \frac{\tilde{e}}{\tilde{e} + \dfrac{\bar{X}_U}{\bar{X}_V} - 1.} \tag{20}$$

The three components in equation (20) that determine the optimal cost-sharing fraction have intuitive meaning. First, $\bar{X}_U$ is the law firm's weighted expected cost for litigating the case, where the weights are the firm's marginal utility of money for each of the possible outcomes.[308] Thus, $\bar{X}_U$ indicates what we call the firm's "true cost" of litigating the case, if the client provided no reimbursement for the costs and if the firm's risk costs are included.

For example, suppose that the firm is risk averse—the firm might be small, thus unable to diversify the risk that this case's costs will be unexpectedly large. For a risk-averse person or entity, the marginal utility of money rises as income falls; a dollar is more important to an impoverished person who needs the dollar to buy a potato for his starving family than the dollar is to a billionaire. Because higher litigation costs mean lower income for both client and law firm, the higher are litigation costs, the higher are the client's and firm's marginal utilities of money V^I and U^I. The more risk averse the firm, the greater the increase in marginal utility of money for a given increase in costs. Thus, in determining its true expected cost of litigating the case, the firm will weight especially heavily the small possibility that the case might turn out to be very expensive to litigate. Because an explosion

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307. Substituting equations (16) and (17) into (15) yields

$$\bar{X}_V EV^I - EN^I CV^I + P*EN^I CV^I - EV^I \bar{X}_U = 0.$$

Substituting equation (18) and rearranging produces

$$P*\bar{X}_V^I EV^I = \bar{X}_V^I EV^I + EV^I \bar{X}_U - \bar{X}_V EV^I.$$

Rearranging,

$$P* = \frac{\bar{X}_V^I EV^I + \bar{X}_U EV^I - \bar{X}_V EV^I}{\bar{X}_V^I EV^I} = 1 + \frac{\bar{X}_U}{\bar{X}_V^I} - \frac{\bar{X}_V}{\bar{X}_V^I}.$$

Rearranging equation (19) and substituting gives

$$P* = 1 + \frac{-\bar{X}_U P*}{\tilde{e}\bar{X}_V} + \frac{P*}{\tilde{e}} = 1 + P*\left(\frac{-\bar{X}_U}{\tilde{e}\bar{X}_V} + \frac{1}{\tilde{e}}\right) \Rightarrow P*\left(1 + \frac{\bar{X}_U}{\tilde{e}\bar{X}_V} - \frac{1}{\tilde{e}}\right) = 1.$$

Rearranging further,

$$P* = \frac{1}{\dfrac{1}{\tilde{e}}\left(\tilde{e} + \dfrac{\bar{X}_U}{\bar{X}_V} - 1\right)} = \frac{\tilde{e}}{\tilde{e} + \dfrac{\bar{X}_U}{\bar{X}_V} - 1.}$$

308. *See* Weitzman, *supra* note 24, at 724-25.

in litigation expenses in the case might bankrupt the firm, the firm's marginal utility of money if an explosion were to occur would be large.

In contrast, if the firm is less risk averse, then, in determining its expected true cost of litigating the case, the firm will not need to weight so heavily the possible high-cost outcomes; the firm's marginal utility of money will not increase much even if costs are large. A large firm that litigates many cases concurrently will not worry as much about the risk that any one case will turn out to be expensive to litigate; on average, lower costs in the firm's other cases will balance out the high cost in this case.

The more risk averse the firm, the higher the firm's true cost for litigating a case. The more risk averse the firm, the heavier the weights that the firm places on the possible high-cost outcomes, increasing $\bar{X}_U$. The firm's true cost of litigating the case includes the cost of the risk that the firm must bear. The more risk averse the firm, the higher the cost to the firm of the possibility that litigation costs for the case will be unusually high.

Second, $\bar{X}_V$ is the client's "true cost" for litigating the case, if the client paid all of the costs. As with $\bar{X}_U$, $\bar{X}_V$ is weighted expected cost where the weights are the client's marginal utility of money for each possible outcome. The more risk averse is the client, the larger will be $\bar{X}_V$; in determining its true cost, a risk-averse client will weight more heavily the possible high-cost outcomes.

Third, $\bar{e}$ measures the degree to which the law firm and its lawyers will succumb to moral hazard: It is a measure of the degree that the case's total litigation costs can be expected to change if the cost-sharing fraction changes. It shows the average percentage cost reduction for a 1% increase in the cost-sharing fraction.[309] That is, $\bar{e}$ shows how much the law firm will reduce total costs if the fee agreement changes so as to pay the firm a higher fixed fee but a smaller additional amount per hour, and requires the firm to absorb more of any additional costs itself. If $\bar{e}$ is large, then the firm's weakness to moral hazard is large; a small increase in P will produce a large cost decrease. If $\bar{e}$ is small, then the firm generally resists moral hazard and even a large increase in the cost-sharing fraction will influence costs little. That is, $\bar{e}$ measures the degree to which the firm can be trusted to act in the client's interest even when the contract creates an incentive to act in a way that harms the client. If $\bar{e}$ is small, then the law firm and its lawyers are trustworthy. If $\bar{e}$ is large, then they will readily betray the client.

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309. *See id.* at 725.

F. Predictions from the Model

The model offers three predictions about the conditions that will cause a client and law firm or lawyer to choose a fixed-fee contract or an hourly contract, or something in between. The predictions, which the remainder of this part discusses, are:

1. The more risk averse is the law firm in comparison to the client, the more optimal is an hourly contract and the less optimal is a fixed-fee contract. If the client is more risk averse than the firm, then a fixed-fee contract is always optimal.

2. If the litigation costs that a case will require are predictable, then the client and law firm will choose a fixed-fee contract. If uncertainty about a case's litigation costs increases, then, if the firm is more risk averse than the client, the optimal contract will move toward an hourly contract. If the firm is less risk averse than the client, then an increase in cost uncertainty leaves the optimality of a fixed-fee contract unaltered.

3. The more that law firms and lawyers are willing to be disloyal to their clients, the more that fixed-fee agreements are optimal for both firm and client.

1. The Influence of Relative Risk Aversion

The optimal contract will depend on the client's and law firm's relative risk aversion. We have seen that the greater the client's risk aversion, the larger is the client's true cost of the case $\bar{X}_V$. Likewise, the greater the law firm's risk aversion, the larger is $\bar{X}_U$. Equation (20) shows that the larger is the firm's risk aversion in comparison to the client's risk aversion, the larger will be $\bar{X}_U/\bar{X}_V$, and the smaller will be the optimal cost-sharing fraction P^*.

Moreover, if the law firm is more risk averse than the client, then a fixed-fee contract will never be optimal; because the firm is more risk averse than the client, $\bar{X}_U > \bar{X}_V$ and $P^* < 1$. Instead, as the small P^* indicates, the optimal contract will have only a small fixed payment to the firm, or no fixed payment, but will reimburse a large fraction of the firm's costs. That is, the contract will resemble the standard hourly contract. Even though the contract will create some moral hazard, it will reduce risk costs by transferring risk from the risk-averse law firm to the risk-neutral client.

If the firm and client are equally risk averse, then the optimal contract is a fixed-fee contract; because $\bar{X}_U = \bar{X}_V$, we see that $\bar{X}_U/\bar{X}_V = 1$, so that $P^* = 1$ by equation (20). The intuition is that, if the firm and client are equally risk averse, then shifting risk from the firm to the client by means of an hourly payment to the firm saves no risk costs; the client bears the risk no better than the firm. But allowing the hourly payment would create cost-increasing moral hazard.

If the client is more risk averse than the law firm, then the optimal contract will always be a fixed-fee contract or a contingency contract,[310] regardless of the level of cost uncertainty. If the client is more risk averse than the firm, then $\bar{X}_V$ will exceed $\bar{X}_U$, and P^* will exceed one, so that a fixed-fee contract is optimal. Intuitively, because an hourly contract creates costly moral hazard, the only possible reason to use an hourly contract is to shift risk from a risk-averse law firm to a risk-averse client. However, if the firm is less risk averse than the client, then the fixed-fee contract would be wasteful because it would both create moral hazard and shift risk to the client, who bears risk less easily than the firm.

Changes in relative risk aversion will alter the optimal contract. For example, if, over time, the law firm's level of risk aversion declines substantially in relation to the client's level, then the optimal contract will shift from an hourly contract to a fixed-fee contract. With the firm becoming less risk averse, changing from an hourly contract to a fixed-fee contract will reduce moral hazard, shift risk to the firm that can now more easily bear the risk, and so reduce the client's and firm's combined risk costs.

2. The Influence of Increased Risk

The model indicates the influence on the optimal cost-sharing fraction of increases in uncertainty about a case's future litigation costs. That is, the model indicates increased uncertainty's effect on the choice between a fixed-fee contract and an hourly contract. Intuitively, the model shows that, if uncertainty increases, the client and law firm will shift risk to whichever of them can bear the increased risks most cheaply. They will shift the increased risk to whichever is less risk averse.

If the law firm is more risk averse than the client, then an increase in cost uncertainty will cause clients and law firms to change from fixed-fee contracts to hourly contracts. In the model's terms, increased uncertainty will cause the optimal P to decrease: The client will pay a lower fixed amount and a larger fraction of the law firm's hourly costs. That is, the client and firm will shift from a fixed-fee contract toward an hourly contract.

This can be seen from equation (20). If there is no uncertainty, then $\bar{X}_U = \bar{X}_V$; because $\bar{X}_U$ and $\bar{X}_V$ are weighted averages of the possible outcomes, they will be identical if there is no uncertainty so that only one possible outcome exists. This is true regardless of the client's and law firm's relative risk aversion; the client's and firm's attitudes toward risk will not matter if no risk exists. Thus, with no uncertainty,

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310. Much like a fixed-fee contract, a contingency contract shifts risk away from the client and to the lawyer. *See supra* text accompanying notes 42, 43.

$\bar{X}_U/\bar{X}_V = 1$, and equation (20) shows that $P^* = 1$. The optimal contract is a fixed-fee contract.

Intuitively, because there is no uncertainty, the law firm or lawyer does not bear any risk costs even under a fixed-fee contract. Accordingly, the fixed-fee contract provides the advantage of eliminating moral hazard, but without the disadvantage of increasing the law firm's risk cost; the case creates no risk.

If the law firm is more risk averse than the client, then an increase in cost uncertainty will cause $\bar{X}_U$ to increase more than $\bar{X}_V$ increases; the increase in risk will tend to increase the risk-averse law firm's true cost, including risk cost, more than it will increase the client's true cost. That is, the law firm's true cost of bearing the risk of incurring the case's litigation costs will increase more than the client's true cost of bearing that risk. Equation (20) shows that, because $\bar{X}_U/\bar{X}_V$ will increase, P^* will decrease. Some additional simplifying assumptions establish this effect even more rigorously.[311]

Intuitively, if uncertainty increases, then it will be in the interests of the client and law firm to shift the risk to the person who can bear it most easily and cheaply. That means shifting risk to the client, if the client is less risk averse than the firm. If the client and firm can save some risk cost by shifting risk, then the savings can be shared between client and firm. However, as the model shows, the impulse to shift cost risk away from a risk-averse firm must be tempered by the danger that doing so will increase the risk of moral hazard; shifting risk from the risk-averse firm decreases risk cost but increases the firm's incentive to be wasteful.

3. The Impact of Differing Levels of Lawyer Disloyalty

The model teaches that the more that law firms and lawyers are willing to be disloyal to their clients—that is, to succumb to moral hazard—the more that fixed-fee agreements are optimal for both firm and client. Expression $\bar{e}$ measures the degree to which the law firm will be willing to betray its client's interests for its own interests. Thus, equation (20) indicates that the larger is $\bar{e}$, the closer is the optimal P^* to one. That is, the more that the law firm will tend to succumb to moral hazard and to favor its own economic interests over its client's interests, the more that the optimal contract becomes a fixed-fee contract. Indeed, if $\bar{e} = \infty$, then equation (20) shows that $P^* = 1$; the optimal contract is a pure fixed-fee contract, with no reimbursement of the law firm's costs. Although the fixed-fee contract shifts risk to the law firm, the contract nonetheless is optimal because it eliminates the much greater potential costs from moral hazard.

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311.   *See* Weitzman, *supra* note 24, at 727-29.

In contrast, suppose that $\bar{e} = 0$; the law firm will always act exactly in the client's interests, regardless of the temptation from the moral hazard that a reimbursement contract might create. In this case, $P^* = 0$; the optimal contract reimburses all of the law firm's costs. The contract shifts all of the risk from the risk-averse law firm to the client. The client need not worry about the impact of moral hazard; the upstanding law firm is immune to it.