#### forthcoming in The International Review of Law and Economics

## Expertise, Contingent Fees, and Insufficient Attorney Effort

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Revised June 1999

### Abstract

Plaintiffs have either developed or less developed cases. Both cases should be taken to court, yet less developed cases need more work by the attorney than developed cases. Only the attorney knows whether a case needs additional work or not; the plaintiff is forced to rely on the attorney's recommendation. We show that under contingent fees attorneys may provide insufficient effort, i.e., they will not work hard on the less developed cases. In contrast, an hourly fee always induces attorneys to take efficient effort.

*Keywords:* litigation, contingent fees, expert services, incentives. *Journal of Economic Literature* Classification Numbers: D82, K41.

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## 1. Introduction

In a typical tort case in the United States the plaintiff's attorney receives her compensation in form of a contingent fee. Under this payment scheme the attorney gets a share of the judgements if her client wins and nothing if her client loses. A common practice is to use a sliding scale: the attorney gets one-third if the case is settled without trial, 40% if the plaintiff wins at trial, and 50% if a judgement for the plaintiff is affirmed on appeal. In contrast, defense attorneys are typically paid an hourly wage for time spent, or by the service performed — regardless of the outcome of the case.

Despite their widespread use, contingent fees are frequently criticized because, e.g., they promote nuisance suits with little legal merit, because of their potential for permitting excessive recovery by attorneys, and because the attorney's stake in the claim creates a conflict of interest with the client which impedes settlement.<sup>1</sup> Several states have, therefore, recently considered limits and regulations on contingent fees, generating debates that have brought these divergent views into sharp focus. Outside the United States most legal systems do not allow attorneys to take cases on a contingencyfee basis, although the UK has recently relaxed these restrictions; see, e.g., Gravelle and Waterson (1993).

There have been several economic analyses on the efficiency of contingent fees. In an interesting recent paper, Dana and Spier (1993) look at the role of the attorney as an expert. Clients do not know the merits of their case. The attorney as the expert finds out about these merits and then recommends whether to pursue or drop the case. If the attorney were paid an hourly fee, she would have little incentive to reveal to her client that the case had a low expected return. Instead, she might lead the plaintiff blindly into litigation regardless of a case's merit. In contrast, when the attorney is paid a contingent fee she will act in her clients' interest and pursue only those cases with a sufficiently high expected return. Therefore, Dana and Spier (1993) conclude that when the attorney has more precise information about the merits of a case than the client, the optimal compensation scheme will

<sup>&</sup>lt;sup>1</sup>An arbitration panel awarded in December 1998 to lawyers for the work they did in helping Florida, Mississippi, and Texas win a settlement from the tobacco industry for health-care cost a staggering \$8.1 billion. The lawyers' awards range from 20 - 35% of what the three states will receive. If the panel uses the same criteria to set fees for the lawyers who represented the other states, some 250 - 450 lucky lawyers could collect between \$20 billion and \$25 billion in fees (The Economist, 02/13/99).

pay the attorney a share of the plaintiff's award.

In this paper we analyze a related expertise problem. Clients have either developed or less developed cases. Both cases should be taken to court with a standard litigation procedure, yet less developed cases need some additional work by the attorney on top of the standard procedure. Only the attorney knows whether a case needs additional work or not. The attorney can put extra effort into the case that is not needed or she can refrain from providing the necessary extra work. The plaintiff is forced to rely on the attorney's recommendation. The attorney's actions, however, are verifiable, i.e., the plaintiff observes how much work the attorney puts into his case.

Let us point out here right at the outset that we do not analyze a moral hazard problem. In a typical moral hazard setup the principal knows the merit of a case. It is efficient that the agent exerts costly effort. The principal thus wants the agent to provide effort but cannot observe the effort choice. Without a clever incentive scheme the agent will shirk. We consider an expertise problem. Here the principal can observe the agent's effort choice but has no idea which level of effort is efficient. The agent may thus provide and charge for unnecessary effort (this phenomenon has been dubbed *demand inducement* in the health economics literature); or the agent may refrain from providing efficient effort. To put it differently: In a moral hazard setup a contract cannot be conditioned on the effort level because effort is unobservable. In contrast, in our expertise problem the contract can be conditioned on the effort level and in section 4 we will show that it is indeed efficient to do so.

The first compensation scheme we analyze is contingent fees. In doing so we do not allow for penalties, i.e., payments from the attorney to the client. We show that if standard litigation generates relatively more surplus than putting the extra work into a case, any contingent fees not making losses lead to insufficient attorney effort: The attorney takes all cases with the standard litigation procedure to court and does not put additional effort into any case. To put it differently, the attorney takes to court as many cases involving minimal effort as she can instead of efficiently prosecuting fewer cases and dealing with some of them more carefully.

Given this rather negative result, we next ask whether there are other compensation schemes that always give the attorney proper incentives and thus lead to efficient litigation. The answer is yes. All we have to do is to pay the attorney by the task/service she performs, i.e., pay her per performed standard litigation procedure and per extra effort provided. Actually, under the circumstances we have used to analyze contingent fees, which is essentially sufficient demand, incentive compatible fee-for-service contracts boil down to paying the attorney by the hour. The reason is simple: If the attorney gets a fixed hourly wage, she is indifferent between engaging in standard litigation and providing the extra work.

We may thus conclude that in our expertise problem, contrary to Dana and Spier (1993), paying the attorney by the hour is generally better than using contingent fees. The role of an attorney as an expert deciding about the client's needs, therefore, does not generally call for contingent fees as the optimal contract structure. Paying the attorney by the hour may provide better incentives in expertise problems than contingent fees.

The remainder of the paper is organized as follows. The next section describes the model. In section 3 we analyze contingent fees. In the subsequent section we consider task-based payment schemes. Section 5 relates our results to the literature and concludes. Proofs are relegated to the Appendix.

## 2. The Model

We consider a large number of plaintiffs each of whom has a potential case. If a case is taken to court, the plaintiff either wins and is awarded damages, or he loses and receives no damages. All plaintiffs' damages are assessed at the same amount which we normalize to 1 monetary unit. Plaintiffs differ, however, in the likelihood p that they will prevail in court. A fraction  $f \in (0, 1)$  of the plaintiffs has a less developed case with the probability of winning  $p_l$  while the other (1-f) plaintiffs have developed cases where the probability of prevailing is  $p_d$ . We have  $1 > p_d > p_l > 0$ , i.e., both cases may be won or lost, yet the probability of winning is higher for developed cases.

In order to bring a case to court a plaintiff needs an attorney. First, the attorney learns the characteristics of the case. During this learning process she finds out whether the case is a developed or a less developed one. The attorney can then take the case as it is to court and the plaintiff wins with probabilities  $p_d$  resp.  $p_l$ . Let d > 0 denote the time the attorney needs for this 'standard' learning cum litigation procedure.<sup>2</sup>

If the probability of winning is low, the attorney can put additional effort e > 0 into the case. Through this extra effort she turns a less developed case

<sup>&</sup>lt;sup>2</sup>Note that only after the investment of d the attorney knows whether the case is developed or less developed. Accordingly, she cannot pick beforehand only those clients with developed cases; she will always have clients with less developed cases.

into a developed one, i.e., she increases the probability of winning from  $p_l$  to  $p_d$ . This effort, for example, involves acquiring evidence of the defendant's negligence which the plaintiff cannot gather himself, or it involves searching for a precedent which strengthens the plaintiff's case.<sup>3</sup> Accordingly, the probability of winning is  $p_d$  if either the case is developed and the attorney invests d, or if the case is less developed and the attorney puts in d + e. If the case is less developed and the attorney invests only d, then also the probability of winning is only  $p_l$ .

As an example, think of plaintiffs as accident victims. After the attorney has learned a developed case, there is nothing else she can do about it but to take it to court immediately. Less developed cases are more complicated. After the attorney has found out the merits of the case, she can put in the extra work and acquire, e.g., additional evidence of the defendant's negligence. Once this effort is provided, less developed cases have the same characteristics as developed cases, i.e., then she should also take them to court immediately.

Each attorney has a capacity measured in units of her time which we normalize to 1. Attorneys either invest this unit of time in their own law firm or they work in an alternative job, say the government, where they earn the reservation wage 1.<sup>4</sup> Accordingly, an attorney's investment of time yields a sunk capacity cost of 1; d measures the minimum average cost of learning a case cum standard litigation and e denotes the minimum average cost of providing extra effort if, say, the attorney performs either activity exclusively. Note that marginal costs are different from average costs. An attorney has a fixed capacity the cost of which is sunk. Therefore, her marginal costs are 0 except for the capacity margin where marginal costs are "+ $\infty$ ".

Let us now describe efficient behavior. Plaintiffs as well as attorneys are assumed to be risk neutral. It is efficient to consult the attorney in the first place, meaning  $fp_l + (1 - f)p_d > d$ : Without an attorney a plaintiff cannot litigate and receives no damages; hiring an attorney who invests d in the case generates expected damages  $fp_l + (1 - f)p_d$ . Furthermore, efficiency

<sup>&</sup>lt;sup>3</sup>Effort e does not involve making a non-meritorious case *seem* meritorious. The effort e will be assumed to be efficiently spent.

<sup>&</sup>lt;sup>4</sup>The normalization of capacity, reservation wage, and damages to one economizes a lot on notation, but may make things harder to read. One referee suggested that it could be helpful to assume that sunk capacity is K and the reservation wage w. In this context, the minimum average cost of, say, additional effort is ew/K and the expected number of clients serviced is K/(d + fe).

requires the attorney to provide the additional effort to turn a less developed case into a developed one, i.e.,  $p_d - p_l \ge e$ . These two assumptions together imply that all plaintiffs should take their cases to an attorney. The attorney should then proceed with the developed cases as they are; less developed cases should first be turned into developed ones before being taken to court. If the attorney behaves efficiently, she incurs expected costs d + fe per case. In return, the case is a developed one for sure yielding expected damages  $p_d > d + fe$ . Accordingly, if the attorney behaves efficiently, she generates surplus  $p_d - d - fe > 0$ .

Following Dana and Spier (1993) we assume that, in addition to her sunk capacity cost of 1, the attorney incurs fixed overheads F > 0. Examples for these overheads include the rent for the office, office equipment, and secretarial staff. The inputs leading to these overheads do not constrain the attorney's capacity. Furthermore, given these overheads, it is still efficient to consult an attorney. More specifically, we assume  $p_d - d - fe \ge F/(d + fe)$ . If the attorney behaves efficiently, she has 1/(d + fe) cases. Thus, the above assumption means that the surplus exceeds the overheads per case. Note that in our setup F are the overall overheads of the attorney whereas Dana and Spier (1993) work with the overheads per client.<sup>5</sup> This difference is important when we next discuss the demand conditions.

The set of active attorneys is large. In the section on contingent fees we assume, as Dana and Spier (1993) do, that with the efficient behavior just described the active attorneys' capacity does not exceed total demand.<sup>6</sup> This assumption implies in particular that due to the atomistic structure of the market an individual attorney considers herself not constrained by insufficient demand, i.e., whatever policy the attorney chooses, she assumes to have enough clients to fully utilize her capacity.<sup>7</sup> In the section on fee-forservices contracts we also allow demand to be lower than total capacity.

Let us now describe the information structure. The plaintiff does not

<sup>&</sup>lt;sup>5</sup>In our framework d can be interpreted as a fixed litigation cost per client.

<sup>&</sup>lt;sup>6</sup>Dana and Spier (1993) assume a constant overhead cost per client. Since this overhead cost per client is independent of the attorney's strategies, they, in fact, assume that each attorney has a clientele of a given size, i.e., in their setup the number of customers per attorney does not depend on the form of the contract. In contrast, in our model the number of customers serviced is endogenous.

<sup>&</sup>lt;sup>7</sup>The determination of the attorneys' entry behavior is beyond the scope of this paper. For an analysis of the entry decisions when firms' remuneration is based on the tasks performed, see Emons (1997).

know the merits of his case. Later he will learn whether he will win or lose. Yet, a less developed case may be won and a developed case may be lost. Accordingly, the plaintiff cannot use this ex post information to infer the ex ante merits of his case.

After the attorney has learned the case, she knows whether it is a less developed or a developed one. When the case is less developed she can put additional effort into it and thereby turn it into a developed one. Yet she can also put extra work into a developed case: then she unnecessarily works e units of time on the case — leaving it at least in good condition. Alternatively, when the case is developed, she can recommend not to put in any additional effort. Nevertheless, she can make the same recommendation when the case is less developed. Ex post the client has no way of finding out whether the attorney put effort into his case that was not needed or whether his case needed additional work that was not provided. The attorney's services thus constitute 'credence' goods as distinct from search and experience goods — from ex post observations the client can never be certain of the quality of the services he has obtained; see Darby and Karni (1973). Note that we assume d and e to be verifiable. This means that the plaintiff observes how much effort the attorney puts into his case. The attorney can, therefore, not cheat by collecting fees for services she did not provide.<sup>8</sup>

## 3. Contingent Fees

Let us now construct for our simple model contingent fees. Denote by  $w^-$  the attorney's compensation when the case is lost and by  $w^+$  her remuneration when the case is won.<sup>9</sup> Since in our setup where all cases have the same award of 1, performance related contracts are simply given by the two numbers  $\{w^-, w^+\}$ , they automatically entail 'contingent fees'.

Contingent fees have to be incentive compatible, meaning that the attorney prefers to turn less developed cases into a developed ones rather than

<sup>&</sup>lt;sup>8</sup>If services are unverifiable, the attorney has yet another possibility to defraud her customers. She can claim to have put the extra effort into a case without having done so, thus collecting extra effort fees from an unlimited number of customers. This related problem is dealt with in Emons (1999).

<sup>&</sup>lt;sup>9</sup>Note that in Dana and Spier (1993) cases may have different levels of damages x > 0. The authors consider performance related contracts of the form  $\{w^-, w^+(x)\}$ . They show that in the optimal contract  $w^+(x)$  is linear in the award x so that the optimal performance contract, in fact, entails 'contingent fees'. Typically, their optimal  $w^-$  is not equal to zero. Therefore, the attorney does not receive a flat percentage of the award. The attorney's share of the award decreases if  $w^- > 0$  and increases if  $w^- < 0$ .

proceeding with less developed cases as they are.<sup>10</sup> This requirement gives rise to the incentive constraint

$$\frac{1}{d+fe} [p_d w^+ + (1-p_d)w^-] \ge \frac{1}{d} \left[ (fp_l + (1-f)p_d) w^+ + (f(1-p_l) + (1-f)(1-p_d)) w^- \right].$$
(1)

If the attorney behaves efficiently, all cases are developed and she earns  $p_d w^+ + (1 - p_d) w^-$  per client. With this efficient policy she takes 1/(d + fe) cases to court. If, however, the attorney does not invest additional effort e into less developed cases, she can use this extra time to take more cases to court. With this policy of insufficient effort she takes 1/d cases to court. Yet, with this strategy only (1 - f) cases are developed whereas f cases remain less developed.

Given the incentive constraint (1), the following question arises: Is there always a system of contingent fees implementing efficient attorney effort? The answer to this question depends on whether or not we allow the attorney to be penalized. By penalties we mean payments *from* the attorney *to* the client. Using our notation, penalties are nothing but negative values of  $w^$ and  $w^+$ . Given the structure of our incentive problem, penalties for losing a case are of particular interest. When we penalize the attorney for losing a case, she has strong incentives to avoid this contingency and thus to provide the extra effort.

In this paper we want to focus on the case where penalties are not allowed, i.e., we restrict  $w^-$ ,  $w^+$  to be non-negative. We do this for two reasons. First of all, most contingent fee arrangements actually used in practice do not penalize the attorney when the case is lost.<sup>11</sup> Second, and more importantly, negative values of  $w^-$  make it rather attractive for the client to lose the case and may, therefore, give rise to a moral hazard problem: If the client has any influence on the outcome, he may try to lower the merits of the case by, say, withholding information, etc. Due to this client's moral hazard problem, we

<sup>&</sup>lt;sup>10</sup>The attorney can also cheat by unnecessarily putting e into developed cases. While this incentive problem plays an important role when the attorney is paid per performed task (see next section), it does not arise here. Under contingent fees only the probability of winning determines the attorney's remuneration and she cannot increase the merits of developed cases. Note that if the attorney is indifferent between two strategies, we assume she will opt for the efficient one.

 $<sup>^{11}\</sup>mathrm{See},$  e.g., Danzon (1983) or Bebchuk and Gunzmán (1995).

rule out penalties.<sup>12</sup>

Given that we do not allow for penalties, we can now state our result that when the value to the attorney of taking an additional case exceeds the value of putting effort into a less developed case, any non-loss-making contingent fees lead to insufficient effort.

**Proposition 1:** Suppose  $w^-, w^+ \ge 0$ . If  $(fp_l + (1 - f)p_d)/d > (p_d - p_l)/e$ , any non-loss-making contingent fees lead to insufficient attorney effort.

This result may be explained as follows. First note that with  $w^- = w^+ = 0$  the attorney has proper incentives. Whatever policy she picks, there are no monetary consequences. Being completely indifferent, she may also opt for efficient litigation. With these contingent fees, however, she makes a loss (1 + F).

Now suppose that we set  $w^+ > 0$  while leaving  $w^- = 0$ . With this new fee structure the profitability of standard litigation is  $w^+ (fp_l + (1 - f)p_d)/d$ while the profitability of additional effort is  $w^+ (p_d - p_l)/e$ . Obviously, if standard litigation generates relatively more surplus than additional effort, these fees induce the attorney to provide too little effort.

Finally, we also set  $w^- \neq 0$ . Then the profitability of standard litigation becomes  $[w^+(fp_l + (1-f)p_d) + w^-(f(1-p_l) + (1-f)(1-p_d))]/d$  whereas the profitability of extra effort changes to  $(w^+ - w^-)(p_d - p_l)/e$ . If we choose  $w^- > 0$ , we make matters actually worse than with  $w^- = 0$  because we increase the profitability of d and lower the profitability of e. The only possibility to make standard litigation less attractive is by choosing  $w^- < 0$ , i.e., penalizing the attorney for losing the case. The attorney finally prefers providing e to minimal effort only when we choose the penalty sufficiently high.

To sum up: We consider the situation where only the attorney knows whether a case needs additional work or not. The attorney can put unnecessary effort into the case or she can refrain from providing necessary extra work. One possible compensation scheme for the attorney is contingent fees. We do not allow for penalties. We show that if standard litigation generates

<sup>&</sup>lt;sup>12</sup>For an analysis of disciplining producers with warranties as performance contracts in the presence of such a consumer moral hazard problem see, e.g., Emons (1988). Note that Dana and Spier (1993) allow for penalties. When the overheads and the costs of learning a case are high, under their system of contingent fees the attorney is punished when the case is lost, i.e.,  $w^- < 0$ .

relatively more surplus than providing the extra work does, any non-lossmaking contingent fees give the attorney the wrong incentives: The attorney takes all cases with the standard litigation procedure to court and does not provide additional effort for any case. Since an attorney takes more cases than is efficient, we may say that she takes an excessive number of cases and spends too little time on each case<sup>13</sup>.

Given this rather negative result, we next ask whether there are other compensation schemes that always give the attorney proper incentives. The answer is yes. All we have to do is to pay the attorney by the task she performs and, under the circumstances we have considered in this section, paying the attorney by the hour actually does the job for us.

## 4. Task-based Remuneration

Let us now show that provided we pay the attorney by the task she performs, we can always give her proper incentives. Denote by  $w^d$  her remuneration for performing the standard litigation procedure and by  $w^e$  her pay for providing the additional effort.<sup>14</sup> Now her incentives are rather different from her incentives under contingent fees. Unnecessarily putting e into developed cases is an unprofitable option under contingent fees: the attorney incurs costs without increasing her expected payment. Yet under task-based remuneration, if  $w^e$  is high compared to  $w^d$ , it may become worthwhile to put einto developed cases.

An attorney's incentives under fee-for-services contracts  $\{w^d, w^e\}$  depend crucially on whether or not her capacity is fully utilized. Therefore, for the sake of completeness, in this section we will also determine incentive compatible contracts when demand is insufficient to fully utilize capacity. To be more specific recall that with efficient behavior the attorney has capacity 1/(d + fe) in terms of clients. Denote by  $\eta$  the number of her clients. According to whether  $\eta \geq 1/(d + fe)$ , we will say that the attorney has too many/enough/not enough clients given efficient behavior.

If the attorney does not have enough clients, she may start putting e into developed cases to utilize her otherwise idle capacities. If she has too

<sup>&</sup>lt;sup>13</sup>Halpern and Turnbull (1983) mention a related phenomeon: A badly diversified attorney may try to take a large number of contingent fee cases and spend as little time as possible on each one in order to get a better diversification of risk.

<sup>&</sup>lt;sup>14</sup>Recall that in our expertise problem the client observes whether or not the attorney provides d and e.

many clients, she may, e.g., be tempted not to put e into less developed cases given that standard litigation is more profitable than providing extra effort. The last example indicates that the attorney's incentives also depend on the relative profitability of performing d and e which, in turn, is determined by the prices  $w^d$  and  $w^e$ . If the attorney has too many clients, the only constraint she faces (at the margin) is her precious time. To maximize profits, she compares the profit per hour standard litigation  $(w^d - d)/d$  with the profit per hour additional effort  $(w^e - e)/e$ . If the former exceeds the later, she will provide too little effort and too much effort if extra effort is more profitable than standard litigation. We specify these ideas in the following proposition.

#### **Proposition 2:**

i) If  $\eta > 1/(d+fe)$ , the attorney behaves efficiently if and only if  $w^e = ew^d/d$ ; ii) if  $\eta = 1/(d+fe)$ , the attorney behaves efficiently if and only if  $w^e \le ew^d/d$ ; iii) if  $\eta < 1/(d+fe)$ , the attorney behaves efficiently if and only if  $w^e = 0$ .

#### – insert Figure 1 about here –

The message of Proposition 2 can be seen in Figure 1. Consider the line  $w^e = ew^d/d$  along which  $(w^e - e)/e = (w^d - d)/d$ . Accordingly, on this equal compensation line the attorney is indifferent between providing d and e so that with too many clients she opts for efficient behavior.<sup>15</sup> In region (I) where  $w^e > ew^d/d$  the attorney prefers providing e to d. Whatever the number of clients, she will put extra effort into all the cases she takes to court, i.e., she overinvests in effort. In region (II) in which  $w^e < ew^d/d$  the attorney prefers standard litigation to providing extra effort so that she wishes to increase the number of cases she takes with standard procedure to court at the expense of additional effort. With enough clients, however, she cannot take more cases to court; she provides extra effort efficiently to make some money out of her otherwise unused capacity. Along the  $w^d$ -axis the attorney has proper incentives if she does not have enough clients. She does not unnecessarily provide e to utilize her idle capacity because there is no money in this activity.<sup>16</sup>

<sup>&</sup>lt;sup>15</sup>In the principal-agent literature a related result is known as the equal compensation principle. See, e.g., Milgrom and Roberts (1992), 228-232.

<sup>&</sup>lt;sup>16</sup>Note that in Proposition 2 i) and ii) we make use of the zero marginal cost of time if demand is insufficient. The conditions stated in the Proposition determine whether effort is expended on d or e, but once spare time is available, it is better to spend this doing something.

We thus see that with task-based remuneration we can always give the attorney proper incentives. To make a comparison with our results on contingent fees, we now confine our attention to the cases of enough and more than enough clients. In these cases with contingent fees the attorney provides insufficient effort if d generates relatively more surplus than e. With task-based remuneration any contract  $\{w^d, w^e\}$  with  $w^e = ew^d/d$  makes the attorney indifferent between the two tasks and is, therefore, incentive compatible.

Note that these incentive compatible contracts, in fact, pay the attorney by the hour. If the attorney gets a fixed hourly wage, she is indifferent between engaging in standard litigation and providing the extra effort.<sup>17</sup> Therefore, she behaves efficiently as long as she is not restricted by insufficient demand. We may thus conclude that when the attorney has more precise information than the client about the merits of the case, paying the attorney by the hour is generally better than using contingent fees.

This last statement is in sharp contrast to Dana and Spier (1993) who obtain the opposite result. They look at a different expertise problem than we do. In their setup cases have different levels of damages. The attorney has to decide whether or not to proceed with a case. In our setup the attorney has to decide whether or not to put extra effort into a case. One implication of our analysis is, therefore, that the role of an attorney as an expert does generally not call for contingent fees as the optimal contract structure. Paying the attorney by the hour may provide better incentives in expertise problems than contingent fees.

Another interpretation of our model is as follows: Suppose d measures the time needed to learn a case cum out-of-court settlement; e is the time the attorney needs to take a case to court. With this interpretation our model allows a statement about the efficiency of settlement rates under alternative fee arrangements — an issue that is discussed quite controversially in the literature.<sup>18</sup> We find that under contingent fees attorneys tend to settle

<sup>&</sup>lt;sup>17</sup>If we want the attorney to, say, make zero profits, we have to set the wage per unit of time to (1+F) which yields  $w^d = (1+F)d$  and  $w^e = (1+F)e$ .

<sup>&</sup>lt;sup>18</sup>This interpretation of our model is somewhat daring because we did not model the pre-trial bargaining process. When the plaintiff decides whether to settle or pursue a case to trial, the settlement rate under contingent fees is lower than the settlement rate under an hourly fee (Miceli (1994)). Posner (1986, 535-536) shows that under contingent fees attorneys have an excessive incentive to settle rather than litigate. Similarly, Miller (1987) shows that when the attorney has the sole power to accept or reject settlement

too often whereas under an hourly fee the attorney opts for the efficient settlement rate.

## 5. Conclusions

In this paper we have analyzed optimal compensation schemes when the attorney acts as the expert who determines on behalf of the client how much effort to put into the client's case. We have shown that contingent fees may lead to insufficient attorney effort. In contrast, paying the attorney by the task she performs always implements efficient behavior. If the attorney is not restricted by insufficient demand, incentive compatible task-based contracts in fact boil down to an hourly wage.<sup>19</sup>

This result contrasts sharply with Dana and Spier (1993). In their model cases have varying stakes and the attorney decides whether or not to drop a particular case. In their expertise problem contingent fees provide proper incentives while payment by the hour need not do so.<sup>20</sup> Both papers together imply that in expertise problems neither contingent fees nor hourly wages are generally optimal. If the attorney decides whether to proceed with a case or drop it, contingent fees seem to do a better job than payment by the hour. Fee-for-services tend to be more efficient when the attorney decides how much effort to put into a case. Our results can be interpreted as follows: If attorneys are busy, we should be sceptical about contingent fees; if attorneys

<sup>19</sup>Of course there are other classes of contracts that will induce efficient behavior. Conditioning the payment on the effort level as well as on the outcome of the case is a candidate for an optimal contract. We have restricted our attention to two classes of contracts, one of which always induces efficient behavior while the other one does so only under special circumstances.

 $^{20}$ Unfortunately, for most of their paper Dana and Spier (1993) confine their attention to performance contracts. They do not explicitly study the efficiency properties of task-based contracts in their formal model.

offers, under contingent fees the attorney is willing to settle for a lower amount than the client; under an hourly fee the attorney would never settle. See our discussion on the attorney's behavior when she has not enough clients. Miller mentions that his result on hourly fees might be different if the attorney has enough customers but he does not further elaborate this point. Gravelle and Waterson (1993) show that under task-based remuneration the attorney settles efficiently if the fees just cover her marginal costs which means in our set-up that she has enough clients. Rickman (1999) extents Miller (1987) and Gravelle and Waterson (1993) to a dynamic setting and shows that contingent fees can make attorneys tough bargainers. In a model where the plaintiff decides Bebchuck and Guzmán (1995) show that the plaintiff gets a higher settlement amount under a contingent fee than under an hourly fee.

have spare capacity, an hourly fee may create demand inducement because time has zero marginal cost. Accordingly, when we want to address the efficiency properties of contingent fees, expertise models give an ambiguous answer.

To conclude let us compare our result with the benefits of contingent fees highlighted in the literature. Contingent fees may be seen as a mechanism to finance cases when the plaintiff is liquidity constrained and capital markets are imperfect. Similarly, they may be used by the attorney and her client to share the risk generated by the case efficiently. See, e.g., Posner (1986, 534-540) or Halpern and Turnbull (1983).

Rubinfeld and Scotchmer (1993) suppose that the attorney has better information about her ability and the plaintiff has better information about the merits of his case. A client who has a high-quality case will be willing to pay a high fixed fee and a low contingency percentage, while a client with a low-quality case will prefer a low fixed fee and a high contingency percentage. In contrast, a high-quality attorney will signal her ability by working for a high contingency percentage.

Schwartz and Mitchell (1970) analyze contingent fees in a model where the client is unaware of the effect of the attorney's effort on the expected damage award. They show that the attorney spends less than the efficient level of effort on the case as long as he contingent fee is less than 100% because the attorney bears the full effort cost but gets only a fraction of the reward. Schwartz and Mitchell do not analyze the efficiency properties of an hourly fee with ignorant clients.

Danzon (1983) shows that contingent fees can be used to address a moral hazard problem: If the client knows the merits of a case but cannot observe the attorney's effort, then tying the attorney's fees to the trial's outcome provides better incentives to exert an efficient effort than hourly fees which tend to induce shirking; see Halpern and Turnbull (1983) who also discuss moral hazard, while focussing on the differences between the American and the British rule.

All these results seem to indicate that contingent fees do a pretty good job when the merits of a case are observable but the attorney's effort is unobservable, i.e., in moral hazard situations. If, in contrast, effort is observable but merits are not, i.e., in expertise situations, our results imply that the case for contingent fees is weaker. If we assume that organizations are in a better position to observe effort than are individuals, our results predict that organizations are less likely to use contingent fees than individuals which is consistent with empirical evidence.<sup>21</sup>

## Appendix

Proof of Proposition 1: Manipulating the incentive constraint (1) yields

$$[dp_d - dp_l + efp_d - efp_l - ep_d] w^+ \ge$$
  
$$[e - ep_d + efp_d - efp_l + dp_d - dp_l] w^-$$
(2)

or

$$w^{+} \leq \left[\frac{e}{dp_d - dp_l + efp_d - efp_l - ep_d} + 1\right]w^{-}.$$
(3)

(3) holds because  $[e - ep_d + efp_d - efp_l + dp_d - dp_l] > 0$  and  $[dp_d - dp_l + efp_d - efp_l - ep_d] < 0$  if  $(fp_l + (1 - f)p_d)/d > (p_d - p_l)/e$ . Moreover, since  $0 > [dp_d - dp_l + efp_d - efp_l - ep_d] > -e$ , the coefficient of  $w^-$  in (3) is negative. Thus, only  $w^- = w^+ = 0$  satisfy (1), but these contingent fees yield a loss (1 + F).

#### Proof of Proposition 2:

i) If  $\eta > 1/(d + fe)$ , the attorney has more clients than she can handle with efficient behavior. Given her time constraint, she is only interested in the profit per hour extra effort  $(w^e - e)/e$  compared to the profit per hour standard litigation  $(w^d - d)/d$ . If  $w^e = ew^d/d$ , which implies  $(w^e - e)/e =$  $(w^d - d)/d$ , she is indifferent between the two tasks and, therefore, behaves efficiently. If  $w^e > ew^d/d$ , she prefers providing extra effort to standard litigation and thus provides too much effort and vice versa if  $w^e < ew^d/d$ .

ii) If  $\eta = 1/(d + fe)$  the attorney fully utilizes her capacity with efficient behavior. If  $w^e < ew^d/d$ , she strictly prefers standard litigation to providing additional effort; yet she provides standard litigation for her entire clientele. She has to provide additional effort to use up her remaining time  $1 - \eta d$ ; efficiently turning the less developed cases of her clientele into developed ones just exhausts her capacity. If  $w^e = ew^d/d$ , the argument is along similar lines as i). If  $w^e > ew^d/d$ , the attorney strongly prefers extra effort to standard litigation. Hence, she will provide additional effort for all cases and thus take fewer than  $\eta$  cases to court.

<sup>&</sup>lt;sup>21</sup>See, e.g., Dana and Spier (1993) and the references quoted therein. This empirical observation can, of course, also be explained by the fact that organizational clients are less risk averse than individuals or have better access to capital markets.

iii) If  $\eta < 1/(d + fe)$  the attorney has unused capacity with efficient behavior. As long as  $w^e > 0$ , she makes money by putting e into cases to use her idle capacity. The incentive for providing too much effort disappears only when  $w^e = 0$ .

#### References

- BEBCHUK, L. A. AND A.T. GUZMÁN, How would you like to pay for that? The Strategic Effects of Contingent Fees and Retainer Arrangements on Settlement Terms, Discussion Paper 165, Harvard Law School (1995).
- DANA, J. AND K. SPIER, Expertise and Contingent Fees: The Role of Asymmetric Information in Attorney Compensation, *Journal of Law*, *Economics, and Organization* 9 (1993), 349-367.
- DANZON, P. M., Contingent Fees for Personal Injury Litigation, Bell Journal of Economics 14 (1983), 213-224.
- DARBY, M. R. AND E. KARNI, Free Competition and the Optimal Amount of Fraud, *Journal of Law and Economics* 16 (1973), 67-88.
- EMONS, W., Warranties, Moral Hazard, and the Lemons Problem, *Journal* of Economic Theory 46 (1988), 16-33.
- EMONS, W., Credence Goods and Fraudulent Experts, Rand Journal of Economics 28 (1997), 107-119.
- EMONS, W., Credence Goods Monopolists, International Journal of Industrial Organization, forthcoming (1999).
- GRAVELLE, H. AND M. WATERSON, No win, No Fee: Some Economics of Contingent Legal Fees, *Economic Journal* 103 (1993), 1205-1220.
- HALPERN, P.J. AND S. M. TURNBULL, Legal Fees Contracts and Alternative Cost Rules: An Economic Analysis, *International Review of Law* and Economics 3 (1983), 3-26.
- MICELI, T. J., Do Contingent Fees Promote Excessive Litigation?, *Journal* of Legal Studies 23 (1994) 211-224.
- MILGROM, P. AND J. ROBERTS, Economics, Organization and Management, Prentice-Hall, 1992.

- MILLER, G. P, Some Agency Problems in Settlement, Journal of Legal Studies 16 (1987) 189-215.
- POSNER, R., Economic Analysis of Law, 3rd ed., Boston: Little Brown (1986).
- RICKMAN, N, Contingent Fees and Litigation Settlement, International Review of Law and Economics forthcoming (1999).
- RUBINFELD, D. L. AND S. SCOTCHMER, Contingent Fees for Attorneys: An Economic Analysis, *Rand Journal of Economics* 24 (1993), 343-356.
- SCHWARTZ, M. L AND D. J. B. MITCHELL, An Economic Analysis of the Contingent Fee in Personal Injury Litigation, *Stanford Law Review* 22 (1970), 1125-1162.



# Figure 1: The equal compensation line