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Department of Economics

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Winand Emons
Claude Fluet

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Schanzeneckstrasse 1
Postfach 8573
CH-3001 Bern, Switzerland
http://www.vwi.unibe.ch

Why Plaintiffs' Attorneys Use Contingent and Defense Attorneys Fixed Fee Contracts*

Winand Emons† Claude Fluet‡
Universität Bern Université du Québec
CEPR, CIRPÉE à Montréal, CIRPÉE

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Abstract

Victims want to collect damages from injurers. Cases differ with respect to the judgment. Attorneys observe the expected judgment, clients do not. Victims need an attorney to sue; defense attorneys reduce the probability that the plaintiff prevails. Plaintiffs' attorneys offer contingent fees providing incentives to proceed with strong and drop weak cases. By contrast, defense attorneys work for fixed fees under which they accept all cases. Since the defense commits to fight all cases, few victims sue in the first place. We thus explain the fact that in the US virtually all plaintiffs use contingency while defendants tend to rely exclusively on fixed fees.

Keywords: litigation, contingent fees, fixed fees, expert services.
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†Departement Volkswirtschaftslehre, Universität Bern, Schanzeneckstrasse 1, Postfach 8573, CH-3001 Bern, Switzerland, Phone: +41-31-6313922, Fax: +41-31-6313383, Email: winand.emons@vwi.unibe.ch.

‡Université du Québec à Montréal, C.P. 8888, Suc. Centre-Ville, Montréal H3C 3P8, Canada, Phone: +1-514-9878386, Fax: +1-514-9878494, Email: fluet.claude-denys@uqam.ca.

1 Introduction

The remuneration of attorneys in American tort and contract litigation follows an interesting pattern: 92% - 98% of individual plaintiffs and 85% - 88% of organization plaintiffs retain their lawyer on a contingency basis. By contrast, 92% - 93% of individual defendants and 95% - 100% of organization defendants pay their attorneys an hourly rate, the rest paid a retainer.[1] While there are quite a few explanations as to why plaintiffs use contingent fees, fairly little has been written as to why defendants tend to rely exclusively on hourly fees. To quote Dana and Spier (1993) p. 363: "... virtually all defense attorneys are paid by the hour. This fact is somewhat puzzling, since many of the commonly accepted explanations for contingent fees apply equally well to both the plaintiff and the defendant." In this paper we want to explain the stylized pattern.

We consider victims who wish to collect damages from injurers. Cases differ with respect to the expected judgement that the plaintiff receives and the defendant pays should the plaintiff prevail in court. To sue a plaintiff needs an attorney. The probability that the plaintiff prevails depends on whether or not the defendant has legal support: a defense attorney lowers the probability that the plaintiff prevails.

If an attorney becomes active, he incurs a fixed cost which represents the overheads of the law firm. In addition, attorneys incur a marginal cost for each client they represent. Attorneys compete for clients by offering contracts. In our set-up equilibria are cost-efficient: only one plaintiffs' attorney and only one defense attorney is active. Prices are such that the active attorneys make zero-profits.

We consider two scenarios. In the first one, clients and attorneys observe the expected judgement. Here we derive two equilibria. In the *low litigation equilibrium* victims expect that all defendants will fight by hiring an attorney. Therefore, only victims with strong cases sue. The plaintiffs' attorney offers contingent fees that allow him to recover his marginal and his fixed cost. Given the plaintiffs' behavior, defendants face only strong (expensive) cases.

[1] See, e.g., Kakalik and Pace (1986), p. 96-97 or Kritzer (1990), p. 58. Under a contingent fee the plaintiffs' attorney gets a share of the judgement if his client wins and nothing if his 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. A retainer is a fee paid up-front for a pre-determined amount of time or work.

This implies that indeed all defendants want to fight and retain the defense attorney. The defense attorney also works on a contingency basis that enables him to make zero-profits.

This low litigation equilibrium is based, however, on empty threats. Should a plaintiff with a weak case sue, the defendant does not want to retain an attorney: the reduction in the defendant's cost is not worth the expense for the attorney. Therefore, plaintiffs with weak cases face a higher probability to prevail than plaintiffs with strong cases. This, in turn, makes suing more attractive for victims. In the *high litigation equilibrium* more plaintiffs sue than in the low litigation equilibrium. Defendants retain the attorney for the strong cases and opt for no legal support for the weak cases. Both attorneys work on a contingency basis that allows them to break even.

Obviously, defendants prefer the low litigation equilibrium: fewer victims sue and the probability that plaintiffs prevail is on average lower. Defendants would thus like to commit to fighting all cases to implement the low litigation outcome. This is possible in our second scenario. Following Dana and Spier (1993) we consider the case where clients do not observe the expected judgement. Only the attorneys as legal experts observe the merits of a case. Under this informational assumption all victims consult the plaintiffs' attorney who decides whether to pursue or to drop the case. Likewise, all defendants consult the defense attorney who decides whether or not to fight a case.

It turns out that the low litigation outcome can now be supported by credible threats. The defense attorney offers a fixed fee contract. To recover his fixed cost, the fixed fee is above marginal cost which means that the attorney earns a quasi-rent with each case. Therefore, the defense attorney happily accepts all cases he can get hold of, independently of the merits. The plaintiffs' attorney anticipates that the defense fights all cases and, therefore, proceeds only with strong cases. As was shown by Dana and Spier (1993), a contingent fee aligns the interest of victims and their attorney: the attorney pursues only those cases with sufficiently high merit.[2]

Our simple set-up is thus able to explain the pattern observed in the US where virtually all plaintiffs use contingency while defendants tend to rely

[2]Dana and Spier (1993) only look at the relationship between plaintiffs and their attorneys. They discuss informally the relationship between defendants and their attorneys. They do not, however, analyze the game played by victims, plaintiffs' attorneys, defendants, and defense attorneys.

exclusively on fixed fees. Being not informed about the merits of her case, the defendant has to rely on her attorney's recommendation whether to fight or not. Under fixed fees the defense attorney recommends to fight all cases. Anticipating that the defense will fight all cases, the plaintiffs' attorney will proceed only with the strong cases in the first place. This implements a low litigation outcome which is, after all, in the interest of defendants.

The literature explaining contingent fee arrangements is fairly extensive. Contingent fees can finance cases when the plaintiff is liquidity constrained and capital markets are imperfect. Furthermore, they allow the attorney and his client to share the risk generated by a case; see, e.g., Posner (1986), p. 534-540. Another explanation is related to the use of contingent legal fees in class-action litigation; see Lynk (1990) and Klement and Neeman (2004).

All other explanations for contingent fees are based on asymmetric information between the attorney and his client. Contingent fees can be used to address a moral hazard problem: If the client cannot observe the attorney's effort, tying the attorney's fees to the trial's outcome provides better incentives to exert effort than hourly fees which tend to induce shirking; see, e.g., Danzon (1983), Gravelle and Waterson (1993), Polinsky and Rubinfeld (2003), and Emons and Garoupa (2006).

In Rubinfeld and Scotchmer (1993) the attorney knows his ability and the plaintiff knows the merits of her case. A client with a high-quality case wishes to pay a high fixed fee and a low contingency percentage, while a client with a low-quality case prefers a low fixed fee and a high contingency percentage. By contrast, a high-quality attorney signals his ability by working for a high contingency percentage.

The virtues of hourly or fixed fees have been addressed in two papers. Emons (2000) looks at the role of the attorney as an expert. The attorney recommends how much effort to put into a case; the client observes the attorney's effort but cannot tell whether it is necessary or not. If the attorney gets a fixed fee and has enough clients, he is indifferent as to his recommendation and acts in his client's interest. Therefore, fixed fees perform generally better than contingent fees which tend to distort the attorney's incentives. Garoupa and Gomez (2007) consider an attorney working in a partnership. The attorney provides unobservable effort. Contingent fees align the attorney's interests with those of the client, but not necessarily with those of the partnership. Hourly fees may be a solution to the common agency problem.

The stylized fee pattern has been addressed in three papers. Emons

(2006) compares conditional and contingent fees in a framework where attorneys are uninformed about the clients' cases.[3] If there is asymmetric information about the risk of cases when the plaintiff hires her attorney, attorneys offer contingent fees; conditional fees would attract only high risk clients and yield losses. If there is asymmetric information about the expected level of adjudication when the defendant retains her attorney, attorneys offer conditional fees; contingent fees would only attract weak cases resulting in losses for the attorney.

Zamir and Ritov (2010) explain the stylized pattern using the prospect theory. Under a fixed fee the plaintiff faces a mixed gamble with chances to make a gain and chances to make a loss; under a contingent fee the plaintiff faces a non-negative gamble. By contrast, the defendant faces purely negative gambles under both fee arrangements. According to the prospect theory players are risk averse when facing the choice between a mixed gamble and a non-negative gamble, and risk loving when facing the choice between two purely negative gambles. Therefore, the plaintiff prefers a contingent fee to avoid the risk, while the defendant opts for the fixed fee to bear all the risk.

In Fong and Xu (2013) the attorneys have private information not only about the outcome if the client accepts the contract, but also about the outcome if the client rejects the contract. To signal the value of their service, plaintiffs' attorneys may use a high contingent fee to send the message that the potential gain for the plaintiff is large and the attorney is willing to share the gain. The defense attorney may use a flat fee to signal that the stakes are very high. Such a contract sends the message that the potential loss of the defendant is large and the defense attorney is unwilling to share the loss by making his compensation contingent on the result of the litigation.

We proceed as follows. The next section illustrates our basic results using a simple numerical example. In the example we do not go into the details of modeling Bertrand competition with fixed costs; we take it as given that one plaintiffs' and one defense attorney serves the whole market and both make zero-profits. In section 3 we describe the model. In subsection 3.1 we look at the scenario where victims and injurers do observe the expected judgment and in subsection 3.2 we analyze the scenario where they don't. Section 4 concludes.

[3]Under conditional fees the lawyer gets an upscale premium if the case is won and nothing if the case is lost. The upscale premium is unrelated to the adjudicated amount.

2 An Example

A victim has been injured and wants to collect damages from the injurer. The judgement is random. Let J denote the expected judgement given the plaintiff prevails: J is thus the amount the victim expects to get and the injurer expects to pay in case the victim wins. There are many injurer-victim pairs differing with respect to J; we take J to be uniform on $[0, 1]$. Low J cases are weak and high J cases are strong from the viewpoint of the victim; for the injurer low J cases are cheap and high J cases are expensive.

A victim cannot sue without an attorney. If the victim/plaintiff is represented by an attorney while the injurer/defendant is not, the probability that the plaintiff prevails is 2/3. If the defendant also hires an attorney to fight the case, the probability that the plaintiff prevails goes down to 1/3. Plaintiffs' and defense attorneys thus move the outcome of the case in their clients' favor.

There is a set of plaintiffs' and a set of defense attorneys. Plaintiffs' and defense attorneys have the same cost structure. If an attorney becomes active, he incurs a fixed cost of 1/48 representing the overhead costs of the law firm. Moreover, an attorney incurs a marginal cost of 1/6 per client he represents.

Competition drives the attorneys' profits down to zero. They offer contracts that maximize their clients' payoff subject to the constraint that the attorneys do not make losses. In equilibrium we will thus observe a cost-efficient industry structure: one plaintiffs' and one defense attorney will serve the whole market and both attorneys make zero-profits. The equilibria are reminiscent of the sustainable outcomes in the sense of Baumol, Panzar, and Willig (1982) where prices equal average costs.

Plaintiffs and defendants do not observe the expected judgement J. By contrast, the attorneys as the legal experts observe J. It is thus the plaintiffs' attorney who decides which cases go to court and which cases are dropped; the defense attorney decides which cases are fought and which cases are dropped.

Let us now describe two equilibria. Consider first the *high litigation equilibrium*. The plaintiffs' attorney charges a fixed component of 1/9 plus a contingency component of 1/3, i.e., in addition to the fixed amount the attorney gets a third of the judgement should the plaintiff prevail. The defense attorney charges each client a fixed fee of 1/12 plus a contingency

component of 1/2, i.e., if the defendant loses, the defense attorney gets 50% of the judgement.[4]

Consider first the defense attorney. With the case $J = 1/2$ the defense attorney just earns the marginal cost. With all cases $J > 1/2$ the attorney earns a quasi-rent; clients with $J < 1/2$ yield losses. The defense attorney thus takes all cases with $J \geq 1/2$ and drops the other ones. The quasi-rents he earns with the cases $J \in [1/2, 1]$ just cover his fixed cost 1/48.

Consider now the plaintiffs' attorney. He anticipates that clients with $J \geq 1/2$ will have legal support so that the probability that the plaintiff prevails is 1/3. Defendants with $J < 1/2$ will have no legal support so that the probability that the plaintiff prevails and the attorney collects his contingency component is 2/3. In the first group of clients the plaintiffs' attorney earns the marginal costs with all cases $J \geq 1/2$; in the second group of clients he recovers the marginal cost with all cases $J \in [1/4, 1/2)$. The plaintiffs' attorney will thus accept all cases with $J \geq 1/4$. The quasi-rents are just sufficient to cover the fixed cost.

Let us now look at the *low litigation equilibrium*. The defense attorney charges each client a pure fixed fee of 5/24; the plaintiffs' attorney charges a fixed amount of 1/12 and a contingency component of 1/2. Consider first the defense attorney. Since the fixed fee exceeds the marginal cost, the defense attorney happily accepts any case, independently of J. If he serves half of the market, the quasi-rents cover the fixed cost.

The plaintiffs' attorney anticipates that defendants will fight all cases. Therefore, he accepts only cases with $J \geq 1/2$. He breaks even with these cases and so does the defense attorney who serves half of the market.

The low litigation equilibrium thus yields the stylized pattern that plaintiffs' attorneys work on a contingency basis while defense attorneys offer fixed fees. Fixed fees allow defendants to commit to fight all cases: Since the defendant doesn't observe J, she delegates the decision which cases to fight to her attorney; he fights any case under the fixed fee. Anticipating the defense behavior, the plaintiffs' attorney only accepts strong cases in the first place. Obviously, injurers do better in the low litigation equilibrium. Victims with

[4]At first glance it may seem somewhat strange that the defense attorney is rewarded for a high J which the defendant has to pay after all. Recall, however, that the defendant wants legal support for expensive cases. A positive contingency component makes high J cases attractive for the defense attorney. In the model we allow for a large class of contracts encompassing contingent fees, reverse contingent fees, and fixed fees.

cases $J \in [1/4, 1/2)$ do not sue at all; in the high litigation equilibrium these victims sue and win with probability 2/3.

3 The Model

A victim of an accident wants to sue the injurer to be paid damages $j \geq 0$. Damages are random; let $J := E(j)$ denote the expected judgment. We consider a continuum of such pairs of victims and injurers and index them by J. For the ease of exposition we take J to be uniform on $[0, 1]$. Once a victim has filed suit, we call her plaintiff and the corresponding injurer defendant.[5]

The probability p that a plaintiff prevails depends on whether or not the parties to the conflict retain attorneys. Specifically, let

$$p = \begin{cases} 0, & \text{if the plaintiff has no attorney;} \\ \nu, & \text{if both, plaintiff and defendant, have an attorney;} \\ 2\nu, & \text{if only the plaintiff has an attorney,} \end{cases}$$

where $0 < \nu \leq 1/2$. To file suit the plaintiff needs an attorney. Moreover, the plaintiffs' and the defense attorney are equally competent. Given the defendant has legal support, hiring an attorney increases the plaintiff's expected payoff by νJ; likewise, retaining an attorney reduces the defendant's expected cost by νJ.[6]

Let us now turn to the attorneys. We consider two separate sets of attorneys, one for plaintiffs and one for defendants. Attorneys in both groups engage in Bertrand type competition by offering contracts. Since under Bertrand two is enough for competition, let there be two plaintiffs' and two defense attorneys.

Besides being equally able, plaintiffs' and defense attorneys have the same cost function. To become active, i.e., to represent clients, an attorney incurs

[5]The random variables of the j's generating the J's have common support with strictly positive density making it impossible to draw any inferences about J from the ex post observation of j.

[6]Note that contest functions yield our probability of success function p with $\nu = 1/2$, except for the case where both parties have no legal representation: our plaintiff cannot sue so that $p = 0$, while contest functions often assume that $p = 1/2$; see, e.g., Baik and Kim (2007).

a fixed cost $F > 0$.[7] If an attorney represents a client, he incurs an additional marginal cost $c > 0$ per case.

We assume that retaining attorneys makes economic sense for plaintiffs and defendants with $J \geq 1/2$ when both attorneys are active. This implies that the attorney's contribution to the case $1/2$ covers marginal costs, i.e., $\nu/2 \geq c$. Furthermore, the attorney must recover the fixed cost when he serves the upper half of the market. If the attorney represents the cases $J \in [1/2, 1]$, the average judgment per case is $3/4$. Accordingly, to break even, we need $(3\nu/4 - c)/2 \geq F$ which together with the preceding assumption implies $\nu/8 \geq F$.

We consider the situation where plaintiffs' attorney 1 and defense attorney 1 are active; they have incurred the fixed cost so that for them F is sunk.[8] The two incumbents face the threat of entry by plaintiffs' attorney 2 and defense attorney 2. The entrants haven't incurred the the fixed cost yet; they can avoid F by staying out of the market.

Both attorneys in both groups offer contracts that we will specify below. The behavior of demand is the same for plaintiffs' and defense attorneys. The more 'attractive' of the two contracts attracts the entire demand. If both contracts are equally 'attractive', the incumbent gets the entire demand. This assignment rule ensures the existence of pure strategy equilibria. In equilibrium both the incumbent and the entrant in each group offer the same contract. This contract maximizes the clients' surplus given the behavior of the other party to the conflict, subject to the constraint that the entrants don't make losses if they are active. The incumbent gets the entire demand. He receives a price covering his marginal cost c plus a mark-up that allows him to recoup the sunk cost F.[9] The entrant has no demand. He doesn't become active, i.e., he incurs no fixed cost and, therefore, also makes zero-profits. He disciplines the incumbent not to raise prices; see, e.g., Vives (1999), p. 119.[10]

[7] F is also the fixed cost per case if the attorney serves the entire market which has size 1 in our set-up.

[8] We do not model the incumbents' entry decision. In equilibrium they earn, however, a quasi-rent that equals their sunk cost.

[9] In the introduction and the example we claimed that the incumbents make zero-profits. This is not entirely correct because F is a sunk cost for the incumbents. Long-run zero-profits seems to be more appropriate.

[10] Dana and Spier (1993) define an equilibrium contract axiomatically as follows: an attorney cannot increase his profits by offering an alternative contract, an attorney cannot

We consider two scenarios. In the first scenario J is observed by the victim, the injurer, and the attorneys; J is, however, not verifiable. In the second scenario J is observed only by the attorneys. Since J is not verifiable, in both scenarios contracts cannot be conditioned on J; they can only be conditional on the actual judgement j.

3.1 Victims and Injurers observe J

We consider the following game. Victims and injurers learn J. Then all attorneys offer contracts. We confine our attention to linear contracts. Plaintiffs' attorneys offer contracts $A+\alpha j$ and defense attorneys offer contracts $B+\beta j$ where $\alpha, \beta \in [-1, 1]$. For $\alpha, \beta = 0$ the attorneys work on a fixed fee basis. Under fixed fees plaintiffs and defendants bear the entire judgment risk. If $\alpha, \beta > 0$, attorneys offer contingent fees. If the plaintiff wins, the plaintiffs' attorney gets αj on top of A and the defense attorney gets βj on top of B.[11] Compared to the fixed fee, under a contingent fee the plaintiff's attorney bears some of the plaintiff's judgement risk. By contrast, a contingent fee increases the defendant's judgement risk compared to a fixed fee; if she loses, she has to pay j to the plaintiff and $B + \beta j$ to her attorney. If $\alpha, \beta < 0$, attorneys offer reverse contingent fees. Under such a reverse contingent fee the plaintiff pays more to her attorney if she loses than if she wins, thus increasing the plaintiff's judgment risk. By contrast, in return for getting a "high" B, the defense attorney bears some of the defendant's judgement risk.[12]

A victim then decides whether or not to hire an attorney. If she wishes legal support, the attorney learns J and decides whether or not he accepts

increase the payoff of his clients holding his own payoff fixed, and a new attorney cannot profitably enter the market. Like in our set-up the equilibrium contract is the one that maximizes the clients' payoff subject to a zero-profit constraint for the attorney.

[11] Using our notation the common 1/3 contingent fee for plaintiffs' attorneys is given by $A = 0$ and $\alpha = 1/3$.

[12] A reverse contingent fee is a percentage of the difference between the amount a third party originally demands from a lawyer's client and the amount that client must ultimately pay the third party, whether by settlement or judgment. The American Bar Association Model Rules of Professional Conduct permit reverse contingency fees if the fee is reasonable, the amount the client may save can be reasonably determined, and the client who agrees to the reverse contingency fee is fully informed; see us.practicallaw.com/7-511-2268. We include the amount that is originally demanded in B.

the case.[13] If the incumbent accepts cases, he incurs the marginal cost c per case. If the entrant accepts cases, he incurs the fixed cost F plus the marginal cost c per case.

Next defendants decide whether or not to retain an attorney. If they seek legal support, the defense attorney learns J and accepts or rejects the cases. If the incumbent accepts cases, he incurs the marginal cost c per case. If the entrant accepts cases, he incurs the fixed cost F plus the variable cost c per case. The case then goes to trial and the plaintiff wins with probability p.

Attorneys maximize expected profits. Victims have expected payoff $pJ - A - \alpha pJ$ if they sue and 0 if they don't; they maximize their expected payoff. Defendants have expected costs $\nu J + B + \beta\nu J$ with and $2\nu J$ without attorney; they minimize their expected costs.

We consider two Nash equilibria of this game. In the low litigation equilibrium all defendants fight by hiring an attorney; in the high litigation equilibrium low exposure defendants do not fight, encouraging more plaintiffs to sue in the first place. Let us start with the low litigation equilibrium.

Proposition 1: *Plaintiffs' attorneys offer the contract $A+\alpha j$, defense attorneys the contract $B + \beta j$ with $\alpha = \beta = 2\nu F/(\nu - c)^2$ and $A = B = (1-\alpha)c$. Victims with $J \geq c/\nu$ wish to hire the plaintiffs' incumbent, who accepts all applications. All defendants wish to retain the defense incumbent who accepts all cases. Both incumbents earn a quasi-rent that covers their sunk cost F.*

Proof: Suppose all defendants fight so that $p = \nu$. A victim wishes to retain an attorney if $\nu J - A - \alpha\nu J \geq 0$ which holds for $J \geq c/\nu$. Thus, all plaintiffs with $J \in [c/\nu, 1]$ wish to be represented by the incumbent. For the marginal case c/ν the incumbent earns c, for the inframarginal cases he earns a quasi-rent that increases in J. For the cases $J \in [c/\nu, 1]$ the average expected judgement is $1/2 + c/2\nu$. Therefore, with all cases $J \in [c/\nu, 1]$, the incumbent earns a quasi-rent $(1 - c/\nu)(A + \alpha\nu(1/2 + c/2\nu) - c) = F$. The quasi-rent thus covers the sunk cost.

The preceding argument implies that entrant will also accept all cases $J \in [c/\nu, 1]$ because the quasi-rent covers his fixed cost F. Therefore, if the incumbent offers less favorable terms for clients, the entire demand switches

[13] It is thus the attorney who makes the final decision to litigate. If clients know J, we let only those clients whom the attorney will accept anyway seek legal support; the decisions to consult an attorney and to litigate coincide. If clients do not observe J, all clients will seek legal assistance and the lawyer decides which cases to pursue.

to the entrant. The entrant makes zero-profits in equilibrium. A less attractive offer for customers by the entrant also generates no demand and thus zero-profits; a more attractive offer by the entrant generates demand but entails losses.

A defendant wants legal support if her expected cost with attorney is less or equal to her expected cost without attorney, i.e., if $2\nu J \geq \nu J + B + \beta\nu J$ or $\nu J - B - \beta\nu J \geq 0$. This is the case for $J \geq c/\nu$. Thus, all defendants indeed wish to fight. The same argument as in the preceding paragraph shows that defense incumbent indeed accepts all cases and the quasi-rent covers his sunk cost. ■

Plaintiffs' attorneys offer a contingent fee contract. Given defendants fight, the attorney earns the marginal cost c with the case $J = c/\nu$; weaker cases yield losses, stronger cases generate a quasi-rent. Therefore, the attorney accepts all cases $J \geq c/\nu$. Moreover, the quasi-rent covers his sunk cost. Defense attorneys offer the same contingent fee contract and, accordingly, also accept all defendants with $J \geq c/\nu$.

In this low litigation equilibrium victims assume that defendants will always fight. Therefore, only victims with strong cases $[c/\nu, 1]$ sue. Given that cases are strong, all defendants indeed want to fight so that the victims' beliefs are borne out in equilibrium. This Nash equilibrium is based, however, on empty threats, i.e., it is not subgame perfect. To see this consider a defendant with $J < c/\nu$. It does not pay for the defendant to retain an attorney. Thus, he will not fight and $p = 2\nu$. This, in turn, will encourage more victims to sue resulting in a high litigation equilibrium.

Proposition 2: *Plaintiffs' attorneys offer the contract* $A + \alpha j$ *with* $\alpha = 2\nu F/(.5c^2 + (\nu - c)^2)$ *and* $A = (1 - \alpha)c$. *Defense attorneys offer the contract* $B + \beta j$ *with* $\beta = 2\nu F/(\nu - c)^2$ *and* $B = (1 - \beta)c$. *Victims with* $J \geq c/2\nu$ *wish to hire the plaintiffs' incumbent, who accepts all applications. Defendants with* $J \in [c/2\nu, c/\nu)$ *do not hire an attorney; defendants with* $J \in [c/\nu, 1]$ *wish to retain the defense incumbent who accepts these cases. Both incumbents earn a quasi-rent that covers their sunk cost* F.

Proof: We solve the game by backwards induction. A defendant wants to retain an attorney if her expected cost of doing so is less or equal to her expected cost without attorney, i.e., if $2\nu J \geq \nu J + B + \beta\nu J$ or $\nu J - B - \beta\nu J \geq 0$. Hence, defendants with $J \in [c/\nu, 1]$ wish to fight while defendants with

$J \in [0, c/\nu)$ do not. Accordingly, for the latter group of defendants $p = 2\nu$. For those defendants who want to fight, the defense incumbent earns c with the marginal case c/ν and a quasi-rent with the inframarginal cases that, moreover, covers his sunk cost. Therefore, he accepts all cases $J \in [c/\nu, 1]$.

Victims $J \in [0, c/\nu)$ face $p = 2\nu$ while $p = \nu$ for victims $J \in [c/\nu, 1]$. All victims with $J \geq c/2\nu$ wish to sue. The plaintiffs' incumbent earns c with the marginal plaintiff $c/2\nu$ of the segment with $p = 2\nu$ as well as with the marginal plaintiff c/ν of the segment with $p = \nu$. For the inframarginal customers in both segments, he earns a quasi-rent. For the cases $[c/2\nu, c/\nu)$, the average expected judgement is $3c/4\nu$, for the cases $[c/\nu, 1]$ it is $1/2+c/2\nu$. Therefore, with the cases $[c/2\nu, 1]$, the incumbent earns a quasi-rent

$$\frac{c}{2\nu}[A + \alpha 2\nu \frac{3c}{4\nu} - c] + (1 - \frac{c}{\nu})[A + \alpha\nu(\frac{1}{2} + \frac{c}{2\nu}) - c] = F.$$

The quasi-rent thus covers incumbent's sunk cost. ■

In this high litigation equilibrium victims correctly anticipate that a defendant with low J will not fight, the return from doing so doesn't cover the cost. Therefore, for low J cases, $p = 2\nu$ and victims with $J \in [c/2\nu, c/\nu)$ sue.

It is obvious that injurers prefer the low litigation equilibrium. In the high litigation equilibrium victims with $J \in [c/2\nu, c/\nu)$ sue and win with probability $p = 2\nu$; in the low litigation equilibrium these victims do not sue at all. The victims' ranking over the two equilibria is exactly the opposite. In the high litigation equilibrium more victims sue than in the low litigation one, which, in turn, allows them to spread the fixed cost on to more cases.

Injurers would thus like to be able to commit to fight all cases. It turns out that if defendants do not observe J and defense attorneys offer fixed fee contracts, defendants commit to fighting all cases.

3.2 Victims and Injurers do not observe J

Let us now consider our second scenario where victims and injurers do not observe J. If the case goes to trial, they observe the actual judgement j from which they cannot, however, infer the ex ante expected judgement J; see footnote 5. Attorneys observe J, i.e., only the attorney knows whether it makes sense to proceed with or to drop a case. This is the set-up considered by Dana and Spier (1993).

The game is now as follows. Attorneys offer contracts. All injurers apply for legal assistance if they expect a non-negative payoff from doing so. The plaintiffs' attorney screens all cases and decides which cases to proceed with and which cases to drop. Plaintiffs accept the attorney's recommendation. All defendants seek legal assistance if they expect a non-negative payoff from doing so. The defense attorney screens all cases and decides which clients he wants to take. Defendants accept the attorney's recommendation.

First note that the strategies described in Propositions 1 and 2 are also equilibria in this scenario with the following modifications. All victims and all defendants try to retain an attorney. In the low litigation equilibrium of Proposition 1 the plaintiffs' incumbent believes that defendants will always fight. Therefore, he drops the cases $J \in [0, c/\nu)$. The defense incumbent accepts all cases. In the high litigation equilibrium of Proposition 2 the incumbent believes that defendants with $J \in [0, c/\nu)$ will not fight while the rest will fight. Therefore, he accepts all cases with $J \in [c/2\nu, 1]$. The defense incumbent drops the cases $J \in [c/2\nu, c/\nu)$ and accepts the cases $[c/\nu, 1]$.

Nevertheless, and by contrast with informed injurers and victims, the present scenario also allows for subgame perfect equilibria where all defendants fight. A defendant does not observe J. Therefore, her decision to seek legal advice is independent of the expected judgement: the defense attorney decides whether to pursue or drop the case. In the most prominent of these equilibria, the defense attorney offers a fixed fee contract. To cover the fixed cost, the fixed fee exceeds the marginal cost. This, in turn, implies that the incumbent happily accepts any defendant independently of J: he leads the defendant "blindly into litigation regardless of the case's merit," Dana and Spier (1993), p. 350.

Proposition 3: *Plaintiffs' attorneys offer the contract $A + \alpha j$ with $\alpha = 2\nu F/(\nu - c)^2$ and $A = (1 - \alpha)c$. Defense attorneys offer the contract $B + \beta j$ with $\beta = 0$ and $B = \nu F/(v - c) + c$. All victims wish to hire the plaintiffs' incumbent, who accepts all applications with $J \geq c/\nu$. All defendants wish to retain the defense incumbent who accepts all cases. Both incumbents earn a quasi-rent that covers their sunk cost F.*

Proof: Consider the defense incumbent. Since the fixed fee $B > c$, he earns a quasi-rent with each case. Hence, he accepts all cases $J \in [0, 1]$. If he has at least $(1 - c/\nu)$ clients, he covers his sunk cost which is the case when the defendants $J \in [c/\nu, 1]$ seek his support.

For the plaintiffs' incumbent the revenue from the cases $J \in [0, c/\nu)$ does not cover the marginal cost c given all defendants fight. Hence, he drops these cases. The marginal case c/v generates revenue equal to marginal cost, for the cases $J > c/\nu$ the attorney earns a quasi-rent. Thus, plaintiffs' incumbent accepts all cases $J \in [c/\nu, 1]$. The quasi-rent covers his sunk cost F. ■

In this low litigation equilibrium contracts are such that defendants and their attorney commit to fight all cases. This discourages low claim victims from suing. The defense attorney does not screen cases in the interest of his clients. The screening is actually done by the plaintiffs' attorney who only brings cases which, in turn, should be fought by defendants.

Several remarks are in order. First, this result only holds because defendants are ignorant about J. Consider, e.g., defendant c/ν. She saves c by fighting, yet pays $B > c$ to the attorney. She would rather not fight were she to knew the quality of her case. The attorney leads her into litigation that is ex post not in her interest. Yet, committing to fight any case is ex ante in the interest of injurers. If, by contrast, the defense attorney offers the contingent fee schedule of Propositions 1 and 2, he only leads a defendant into litigation if it is ex post in her interest. But this is not what injurers want ex ante.

Next, not only the fixed fee, but also contingent fee and reverse contingent fee contracts allow injurers to commit to fight. Consider first the reverse contingent fee contract with $\beta = -2\nu F/(v-c)^2$ and $B = c - \nu\beta$. Under this contract the defense attorney is paid less the higher the judgement; low J cases are attractive and high J cases unattractive for the attorney. He takes over some of the defendant's judgement risk for which he is compensated by a high B. Under this contract the defense attorney earns c with the marginal case $J = 1$; he earns a quasi-rent for all cases $J < 1$. The defense attorney is thus willing to accept all cases. With $(1 - c/\nu)$ clients the defense attorney breaks even.

Furthermore, any contingent fee contract with $0 \leq \beta \leq 2\nu F/(\nu - c)$ and $B = \nu F/(\nu - c) - \beta(v + c)/2 + c$ also does the trick. Under all these contracts the defense attorney earns c or more for $J \geq c/2\nu$. The defense attorney happily accepts all cases $J \geq c/2\nu$ (or even more cases if $\beta < 2\nu F/(\nu - c)$). The plaintiffs' attorney, therefore, expects $p = \nu$ for $J \geq c/2\nu$ and accepts only clients with $J \geq c/\nu$. With $(1 - c/\nu)$ clients the defense attorney, in turn, breaks even. We have formulated the Proposition for $\beta = 0$,

because the fixed fee contract transmits in the perhaps most transparent way the following message: when asked for his assistance (and he will be asked because defendants are ignorant about J), the defense attorney will fight every case.

The contingent fee contract of the plaintiffs' attorneys is, by contrast, uniquely determined given that $p = \nu$. This follows from Proposition 1 of Dana and Spier (1993). They allow for a general class of contracts and show that the optimal contract is indeed linear. Therefore, focusing on linear contracts is not restrictive for plaintiffs' attorneys.

Welfare statements are somewhat tricky because the conflict is purely redistributive: the amount the plaintiff wins equals the amount the defendant loses. Therefore, in the efficient allocation no victim sues and society saves the time and effort of attorneys who can do other, productive things. Viewed from this perspective the low litigation equilibria are more efficient than the high litigation equilibrium because fewer victims sue. Due to our assignment rule, in all of our equilibria there is no duplication of fixed costs, i.e., we have cost-efficiency: only one plaintiffs' and one defense lawyer is active. Moreover, in all of our equilibria the attorneys' contributions for their clients equals at least marginal costs.

Consider the extension of our set-up where the attorneys can put unobservable effort into the case: by working hard the plaintiffs' attorney increases p while the defense attorney's effort lowers p. Besides our expertise problem we now have an additional moral hazard problem. The contracts given in Proposition 3 give rise to the following incentives. The plaintiffs' attorney has an incentive to provide effort under contingent fees: both, the plaintiff and her attorney want to win the case. By contrast, the defense attorney who is paid a fixed fee has no incentive to provide costly effort.

Suppose instead of the fixed fee we use a contingent fee that commits the defense to fight all cases; see our discussion above. This actually compounds the defense attorney's moral hazard problem. If $\beta > 0$, the defendant and her attorney have diametrically opposed interests: losing the case is good for the attorney (he collects the contingency) and bad for the defendant.[14] Furthermore, a contingent fee exacerbates the defendant's judgement risk.

Finally, consider the reverse contingent fee where $\beta < 0$. Now the incentives of the defendant and her attorney are aligned: both want a low probability that they lose the case and the attorney has an incentive to put

[14]In fact, the lawyer has an incentive to sabotage his own client's case.

in effort. To summarize this discussion: The fixed fee $B = \nu F/(\nu - c)$ and the reverse contingent fee $\beta = -2\nu F/(\nu - c)^2$ and $B = c - \nu\beta$ both implement the low litigation outcome by committing the defense to fight any case. The reverse contingent fee shares the judgment risk between the defendant and her attorney and, moreover, aligns their interests. The fixed fee conveys in a straightforward manner the message that the defense fights any case. Given that virtually all defendants use fixed fees, the role of transmitting the commitment seems to be more important than the role of risk sharing and the role of providing incentives to choose high effort.

In our model the amount of time the attorney works on the case is exogenously given so that an hourly and a fixed fee boil down to be the same thing. Suppose, by contrast, the attorney decides how much time to put into the case; the client observes the hours, yet has no idea how much time is necessary. In such a set-up, if the attorney is paid by the hour, he has an incentive to "overlawyer" cases.[15] It is clear that with our fixed fee exceeding marginal costs such an incentive to "run the meter" exists which is ex post not in the client's interest. This incentive to run the meter may, however, counteract the missing incentive to provide unobservable effort. Moreover, as is the case in our model, an ex post inefficiency may be ex ante beneficial for the defendants. "Churning" by the defense attorney may deter victims to sue in the first place.[16]

4 Concluding Remarks

The purpose of this paper is to explain the fact that plaintiffs retain their attorneys under contingent fees while defense attorneys work for fixed fees. Our clients do not observe the expected judgement. It is thus the attorneys who have to decide which cases to pursue and which cases to drop. Under a fixed fee exceeding marginal costs, a defense attorney happily accepts all cases he can get hold of. Using fixed fees the defense thus commits to fight all cases. This, in turn, induces plaintiffs' attorneys to drop the weak and pursue only the strong cases. This results in a low level of litigation which

[15] "...most lawyers will prefer to leave no stone unturned, provided, of course, they can charge by the stone." Rhode (1985), p. 635.

[16] This seemed to be the case in the tobacco litigation of the 1970's. A few smokers sued the tobacco companies sequentially; the majority of smokers didn't sue. Those who sued faced tobacco companies fighting by all legal means, just to deter future litigation.

is in the interest of injurers.

Kritzer (2007), p. 3 and 9 argues that tort claimants are the archetypical one shot players while tort defendants and their insurers are the archetypical repeat players. The defense may "play for rules" or "play for reputation." To support such a result formally, one has to invoke infinitely repeated games to create an incentive to build up the reputation of being tough. We consider a one shot game that yields a similar idea: By using fixed fees the defense commits to being tough and fight all cases by all legal means.

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