Public Markets for Claims in Litigation*

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Abstract

We analyze how the recent introduction of public pricing in litigation finance markets affects plaintiffs' financing decisions and settlement bargaining. In our model, a plaintiff sells shares of future case proceeds via a market maker that reveals case quality through a public price signal. Settlement bargaining is modeled as a one-sided private information game where the informed defendant makes offers to the plaintiff. We characterize all perfect Bayesian equilibria—a family of semi-separating equilibria—and apply the Myerson neutral bargaining solution for equilibrium selection. Our main finding is that plaintiffs optimally oversell their claims relative to optimal risk sharing: by reducing their risk exposure, plaintiffs credibly commit to tougher settlement demands, and the resulting bargaining gains outweigh the per-share price discount. We show that more precise prices amplify this overselling tendency, as better signals disproportionately benefit the more risk-exposed investors. Consequently, the welfare implications of public prices are ambiguous: additional information that fosters agreement in bargaining simultaneously strengthens the commitment motive, amplifying overselling and litigation risk. Extending the model to a market maker with endogenous investor mass, we find that the ability to spread exposure across multiple investors further strengthens the commitment motive, pushing optimal issuance above the representative-investor benchmark.

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1 Introduction

Litigation finance markets enable litigants to obtain funding from investors for their legal cases, e.g., for corporate litigation and patent infringement disputes. Over the past two decades, these markets have grown substantially, reaching an estimated USD 20 billion annually worldwide by 2025.[1] They attract not only specialized litigation funds but also hedge funds and other institutional investors. As these financing markets may influence dispute resolution outcomes, they have drawn increasing scrutiny from both practitioners and academics [Daughety and Reinganum, 2014].

A central concern is how the structure of litigation financing affects settlement bargaining. The financing contracts typically take a non-recourse structure: litigants sell shares of future litigation cash flows to investors without repayment obligations if the case fails. According to Steinitz [2013] and Solas [2019], these contracts may serve as commitment devices for litigants in settlement bargaining. By reducing the litigants' exposure to uncertain trial outcomes, they can strengthen the litigants' negotiation positions. With relatively smaller potential losses, they make tougher settlement demands to their opponents. While this may benefit individual litigants, it ultimately drives more cases to court, a costly and therefore inefficient outcome for the legal system.

A notable recent development in litigation finance, however, has been the emergence of Juristrade, a market exchange launched in 2025 that allows institutional investors to trade shares in litigation claims at publicly observable prices. Arguably, Juristrade may fundamentally change the informational environment of litigation cases. The participants on this public market are often specialized litigation finance funds, which possess data from previously financed cases highly informative of expected proceeds from a claim. Consequently, the prices on this market may reveal this information to all litigants involved. Since common information usually fosters more agreement in negotiations, one might naively expect such a public market to improve efficiency in legal outcomes, possibly ameliorating the inefficiencies delineated above.

This paper examines the emerging public markets for litigation financing through a theoretical lens and provides a careful and nuanced assessment of whether they can actually improve bargaining efficiency. Motivated by the considerations delineated above, we construct a parsimonious model that features two channels through which financing affects bargaining: a commitment channel, through selling shares to investors and reducing exposure to risky court outcomes, and an information channel, through the additional information provided by public prices. Crucially, these channels do not operate in isolation; they interact. We allow litigants to endogenously choose the shares sold for financing. Therefore, any shift in the informational environment that alters anticipated bargaining outcomes also affects financing incentives. When financing changes, this in turn affects

[1] See Research Nester [2025].

bargaining through the commitment channel.

Our two-stage model encompasses financing and settlement bargaining. For the financing, to identify the main effects, we consider both the case of a representative investor and a market maker attracting a mass of investors. In both cases, the investors perform due diligence on the plaintiff's case, generating a signal about the plaintiff's damages that is observed by the plaintiff before he chooses his financing share. After the plaintiff has chosen his financing share, the resulting market price is publicly observable, including to the defendant, allowing her to infer the due diligence signal. All agents, including plaintiff, defendant, and investors, exhibit constant absolute risk aversion. For the settlement stage, we model bargaining as a signaling game in which the privately informed defendant proposes a transfer to the plaintiff, who can accept the proposal with some probability or reject it. For equilibrium selection in this signaling game, we apply the intuitive criterion and Pareto efficiency. To obtain a unique equilibrium, we further refine using the cooperative neutral bargaining solution of Myerson [1984], an extension of the Nash-bargaining solution to the case of asymmetric information.

Because public markets for litigation assets are so new, we are the first to study them. However, the insights gained can also apply to syndicated financing arrangements, where financing arrangements are verifiable during bargaining with litigation opponents. Our model of litigation financing differs from the previous literature, including Daughety and Reinganum [2014], Avraham and Wickelgren [2018], Spier and Prescott [2019] and Antill and Grenadier [2023], by modeling bargaining with risk-averse investors and allowing endogenous financing choices. Furthermore, to the best of our knowledge, ours is the first application of the Myerson neutral solution to settlement bargaining.

Our analysis yields the following main results: *The bargaining signaling game has a unique semi-separating equilibrium, pinned down by the Myerson neutral bargaining solution.* Fully pooling and fully separating equilibria are both impossible: a pooling offer unravels because strong-defense defendants prefer to deviate to a lower transfer, while full separation fails because bounded acceptance probabilities cannot screen an unbounded type space. Surviving equilibria have a cutoff structure—weak defendants pool on a common offer accepted with certainty, while those with stronger defenses separate through offers declining in type and accepted with probability less than one. This random acceptance is the equilibrium's screening device; the resulting trial probability is the price of information revelation. We apply the Myerson [1984] neutral bargaining solution, which, following Pęski [2022], connects the outcome of our non-cooperative game to an alternative version, where the proposer is random and can propose mechanisms.

Plaintiffs optimally oversell their claims relative to risk parity. The plaintiff's optimal financing share strictly exceeds the risk-parity level at which per-unit price is maximized. At risk parity, plaintiff and investor bear identical risk-adjusted exposure, preferences are aligned, and the asset commands its highest price. Selling beyond this point creates

misalignment: the plaintiff becomes effectively less risk-averse, adopts a tougher bargaining stance, and imposes greater trial risk on investors, who discount the price accordingly. The mechanism is commitment through risk reduction: by shedding exposure past the risk-parity threshold, the plaintiff credibly hardens settlement demands because altered incentives drive the tougher stance. The strategic surplus gain outweighs the per-share revenue loss, generating a double inefficiency: excess litigation and below-optimal asset pricing.

More precise public prices amplify rather than dampen the overselling incentive. Higher signal precision raises the plaintiff's optimal financing share whenever investors are effectively more risk-averse than the plaintiff—a condition satisfied precisely because the plaintiff is already overselling. Greater precision reduces the variance of litigation outcomes. Because investors bear more risk per unit than the plaintiff at the optimum, they benefit from variance reduction disproportionately, raising the price they pay and amplifying the revenue channel toward a larger stake sale. The result overturns a natural conjecture: rather than reducing the plaintiff's need to derisk, more informative prices increase the return to financing and push the plaintiff further into overselling. Public price discovery reinforces the inefficiencies of litigation finance. Hence, the welfare implications of the additional information are ambiguous.

The market maker's ability to spread risk across investors further amplifies overselling. The plaintiff sells a strictly larger share under market maker financing than in the representative-investor benchmark when the single-investor optimum lies near risk parity. The mechanism turns on the separation between aggregate issuance and per-investor exposure: the market maker recruits an endogenous mass of investors whose individual exposure grows more slowly than total issuance. Commitment benefits scale with total issuance, but the price penalty is diluted across many investors each near risk parity. This asymmetry, with aggregate commitment gaining versus per-capita price costs, tips the balance toward more issuance. Financing volume is also less fee-sensitive in the overselling region, and a revenue-maximizing market maker exploits this inelasticity by setting fees that keep the plaintiff in the strategic overselling range.

The remainder of the paper proceeds as follows. Section 2 reviews the related literature. Section 4 develops the model, covering settlement bargaining and the financing stage. Section 5 characterizes settlement bargaining as a signaling game, establishes the existence and structure of semi-separating equilibria, and applies the Myerson neutral bargaining solution to select a unique equilibrium. Section 6 analyzes the financing stage: we first study a representative investor benchmark that isolates the core commitment and price effects, then extend to the market maker setting with endogenous investor mass. Section 7 explores extensions including market maker fees. All proofs are collected in the Appendix.

2 Related Literature

Daughety and Reinganum [2014] use a signaling model to study how nonrecourse third-party loans to plaintiffs affect settlement when the plaintiff has private information about damages. They show that the funder-optimal loan contract with a contingency for low recoveries induces all plaintiff types to pool at the same settlement demand, which the defendant accepts. Full settlement obtains because the nonrecourse structure makes the plaintiff's expected net recovery from trial independent of her true type, eliminating the incentive to signal through costly separation. Their results also extend to the case where instead the defendant holds private information about liability. However, their results depend on the funder writing contracts while expecting to be uninformed about the plaintiff's case quality, and the plaintiff observing his type only after agreeing to the contract. While the paper is technically rigorous and well argued, its conclusions run counter to many concerns raised in the legal literature, including by Steinitz [2013] and Solas [2019]. We generate the commitment effects and settlement breakdowns they describe by introducing risk-averse litigants and abstracting from the contingent waterfall structures in the main part of our analysis. While the waterfall structures are common, they are not commonly triggered.

Avraham and Wickelgren [2018] analyze third-party litigation funding under a monopoly and Bertrand duopoly competition between funders, which receive informative binary signals about case strength. They study whether admitting the funding contract as evidence in court is welfare-improving. When admissible, the contract serves as a credible signal of case quality to the court: a high-signal funder must offer more favorable terms to separate from a low-signal imitator, reducing the funder's monopoly rents and expanding access to financing. Our paper shares the feature that funders convey information, but the information flows in a different direction and serves a different strategic purpose: in our setting the publicly observable price signals case quality to the defendant rather than to a court. Moreover, we study the effects on bargaining. Their work and ours naturally relates to the literature on the real effects of financial markets. Extensive surveys are provided by Bond et al. [2012] and Goldstein [2023].

By comparison, Spier and Prescott [2019] study court outcome contingent contracts between risk-averse litigants with divergent subjective beliefs, comparing "inside contracts" between the parties to "outside contracts" with third-party investors. They show that litigants weakly prefer contracting with risk-neutral third parties. Their analysis abstracts from agency problems between litigants and investors. Moreover, due to their focus on optimal contracting between parties, they do not consider the effect of third-party investors on bargaining between litigants. Their work does however indicate a possible extension of our work to more complex contracts between litigants. In contrast, we also consider different market structures for financing.

More recent work has examined litigation funding from complementary perspectives. Antill and Grenadier [2023] model bargaining as a real-options environment where third-party financing affects plaintiff-defendant strategic interactions by relaxing plaintiffs' financial constraints, demonstrating that financing can enhance joint surplus by deterring wasteful defense spending; essentially a war chest argument where less constrained offensive spending by plaintiffs may reduce defendants' incentives for defensive expenditure. Grenadier and Grenadier [2025] analyze how procedural changes affect filing decisions and show how disclosure requirements regarding financing arrangements impact litigation outcomes. Both papers contribute important insights into dynamic bargaining. Our paper complements this literature by explicitly analyzing how public price discovery, strategic commitment and agency frictions affect settlement bargaining.

For the bargaining stage with incomplete information, we model a signaling game in which the privately informed defendant makes offers to the plaintiff. This generates a continuum of perfect Bayesian equilibria with cutoff structures, all satisfying the intuitive criterion of Cho and Kreps [1987]. For equilibrium selection, we employ the neutral bargaining solution introduced by Myerson [1984]. Myerson generalizes the Nash bargaining solution to settings where players hold private information, characterizing solutions that are both equitable and efficient. This framework is well-suited for selecting among the multiple equilibria in our signaling game. For broader surveys of bargaining under incomplete information, see Ausubel et al. [2002].

The most related works from the classical litigation and settlement bargaining literature include Bebchuk [1984] and Schweizer [1989]. Bebchuk analyzes one-sided incomplete information where defendants hold private information about trial outcomes, showing that informational asymmetry can prevent settlement. Schweizer extends this to two-sided incomplete information, demonstrating that refinement criteria select a unique separating equilibrium with positive litigation probability. Our model builds on this foundation with plaintiff damages and defendant liability defenses, considering one-sided private information. This two-dimensional type structure allows us to cleanly separate two distinct sources of inefficiency: bargaining breakdown arising from the defendant's private information about liability, and the additional information about damages conveyed by the public financing price. Dana and Spier [1993] examine contingent fee arrangements when attorneys possess superior information about case quality relative to clients. Choi and Spier [2018] analyze how plaintiffs can take financial positions in defendant firms before filing suit, focusing particularly on short-selling, and demonstrate that moderate short-selling can benefit both parties by relaxing credibility constraints.

3 Institutional Background

Litigation finance or third-party litigation funding refers to financing arrangements in which an entity with no prior interest in a dispute provides capital to a litigant, typically the plaintiff, in exchange for a share of any eventual recovery [Solas, 2019]. These arrangements are predominantly non-recourse: if the case fails, litigant owes nothing; if it succeeds, the funder receives a contractually specified portion of the proceeds from settlement or trial judgment. For details on structured funding contracts see [Daughety and Reinganum, 2014].

Third-party litigation funding is not without precedent, in particular, for individual plaintiffs. Contingency-fee arrangements have long served a similar economic function: rather than paying upfront, the plaintiff compensates counsel with a share of the recovery. Corporate plaintiffs, however, occupy a different landscape. The law firms capable of handling complex commercial disputes are typically too illiquid and leveraged to absorb the full risk of a major case on contingency [Shepherd and Stone, 2015]. Litigation funders step into precisely this gap, offering corporate claimants an analogous risk transfer: external capital in exchange for a stake in the outcome, targeting cases that are prohibitively expensive or have a payoff too temporally remote for law firms to carry on their own.

Litigation funding serves three related but distinct functions [Bedi and Marra, 2021]. First, it relaxes capital constraints: a plaintiff who lacks the liquidity to finance complex litigation (legal fees, expert witnesses, discovery costs) can effectively pursue a claim only if an external party advances the necessary funds. Second, it provides risk sharing. Even a well-capitalized firm may face claims whose magnitude is large relative to the firm's balance sheet; a patent holder suing an infringer for damages that rival the holder's entire annual revenue, for example, bears concentrated downside risk that litigation funding can diversify away. Third, funding addresses an opportunity-cost problem: firms embroiled in legal disputes must simultaneously finance ongoing operations (research and development, production, etc.), and a protracted lawsuit can crowd out these competing uses of scarce resources. A technology firm defending a patent portfolio, for instance, may prefer to preserve internal capital for product development and let a funder carry the litigation.

These functions carry distinct, and potentially opposing, welfare implications. Relaxing capital constraints expands access to justice and may strengthen deterrence, provided the funded claims are meritorious. Risk sharing and opportunity-cost relief operate even for plaintiffs who could self-finance, improving the efficiency of capital allocation. At the same time, all three channels raise the concern that funding enables claims of marginal merit that would not survive a cost-benefit assessment borne entirely by the plaintiff: either because the plaintiff lacked the resources to bring them, because the plaintiff would rationally have declined to bear the concentrated risk, or because the plaintiff's capital was better deployed elsewhere.

Beyond access, a distinct concern is that non-recourse financing alters litigants' incentives in bargaining. Because the funder bears the invested capital if the case fails, the plaintiff's residual exposure to trial outcomes is reduced. This risk transfer may in turn affect the plaintiff's bargaining behavior, potentially leading to tougher settlement demands and a higher probability of costly trial. Steinitz [2013] describes the resulting tension:

> "[T]he concern is that funders are incentivized to settle early for a discounted but secure amount rather than proceed to a costly trial that may result in a loss or low recovery. [...] And the plaintiff, who no longer bears the risk of a loss, may now have an incentive to resist a reasonable and rational early settlement in favor of a late settlement or even a risky and expensive trial."

This passage confirms that risk sharing alters bargaining behavior, with the underlying shift in risk exposure as the driving mechanism. It also highlights a misalignment between funder and plaintiff: once a stake is sold, their settlement preferences diverge, worsening incentives toward costly litigation strategies such as prolonged delay. In our model, we take risk aversion and exposure as the primitive forces shaping bargaining outcomes, and we explicitly model the market microstructure of funding contracts to explore the misalignment and the concomitant additional friction.

These frictions are not unique to litigation. Steinitz [2013] draws a systematic analogy to venture capital, where uncertainty, information asymmetry, and incentive misalignment are managed through staged financing, board representation, and incentive-aligning contracts. In the litigation context, the funder plays an analogous role: tying capital to case milestones, selecting counsel, shaping strategy, and monitoring expenditure. This perspective underpins our modeling choice to treat the funding contract as a risk-sharing and information-production arrangement whose terms endogenously shape settlement bargaining, rather than as a simple capital transfer.

Litigation funding is also an information technology. Funders invest in due diligence, legal analysis, damages modeling, and precedent research, before committing capital, and this effort produces a signal about case quality that neither litigant may possess on their own. As Solas [2019] observes:

> "Third party funders [...] would be more capable of pricing the value of that claim. Having a more precise assessment and not being cost and risk constrained (besides showing legal sophistication and financial strength) levels the playing field and obviously induces more settlements and higher settlement amounts."

The critical question is whether this information stays private or leaks to the defendant. The answer depends on market structure. In a bilateral funding arrangement, the funder's

valuation is observed only by the contracting parties; the defendant must infer what she can from the mere existence of a funding agreement. On a public trading platform, by contrast, the price at which claims change hands aggregates multiple investors' assessments and is visible to everyone, including the defendant. Information that was once locked inside a private contract is now broadcast through a market price. Naturally, a plaintiff may also reveal the financing terms in its private contract.

The institutional landscape reflects exactly this spectrum. Traditional financing is a closed, bilateral transaction: one specialized funder negotiates directly with the plaintiff, and the resulting terms remain confidential. In syndicated financing, a lead funder originates the deal and distributes shares to co-investors, broadening the investor base but keeping the network private and the information largely contained. The frontier is genuinely public: platforms such as Juristrade, launched in 2025, allow a market maker to intermediate between the plaintiff and a broad pool of institutional investors who trade claim shares at posted prices. These prices aggregate dispersed private assessments into a single public statistic observable by all parties to the dispute. Moving along this spectrum, from bilateral to syndicated to exchange-traded, simultaneously deepens the market's capacity to absorb litigation risk and sharpens the informational environment in which settlement bargaining occurs.

4 Model

A plaintiff holds a litigation claim against a defendant, which may be resolved through settlement or trial. Before bargaining, the plaintiff can sell a share of future case proceeds to an investor, who publicly reveals case quality through the price. We develop a two-stage model: first financing and investor due diligence, then settlement bargaining under incomplete information.

4.1 Settlement bargaining

Litigants and types. A plaintiff P (he) holds a claim against a defendant D (she). Each litigant is characterized by a type $\theta_j \in \Theta_j = \mathbb{R}$ with $j \in \{P, D\}$ that determines court outcomes. The plaintiff's type θ_P represents damages—the harm he has suffered (e.g., lost profits, medical expenses). The defendant's type θ_D represents liability defenses—factors that reduce her obligation (e.g., contributory negligence, assumption of risk). Intuitively, higher plaintiff damages increase the potential court award, while stronger defendant defenses reduce it. The information is asymmetric. The defendant privately observes her type θ_D, while the plaintiff's type θ_P is uncertain to both parties. Both litigants share a common prior over (θ_P, θ_D). A priori, types are independent and normally distributed, with $g(\cdot)$ and $G(\cdot)$, $f(\cdot)$ and $F(\cdot)$ denoting the pdf and cdf of the prior distribution of θ_D

and θ_P respectively. We have for both litigants:

$$\theta_j \sim \mathcal{N}(\mu_j, \sigma_j^2) \quad \text{for } j \in \{P, D\}.$$

Actions and utilities. The defendant proposes a transfer $x \in \mathbb{R}$ to the plaintiff, who chooses an acceptance probability $\pi \in [0, 1]$. With probability π, settlement occurs: the defendant pays x to the plaintiff. With probability $1 - \pi$, the case proceeds to trial, where the court awards the plaintiff the *conflict payoff*

$$x^c = \theta_P - \theta_D.$$

Both litigants exhibit constant absolute risk aversion with $u_j(w) = -e^{-\rho_j w}$ for $j \in \{P, D\}$ and $\rho_j > 0$. Under settlement with transfer x, the plaintiff receives $u_P(x)$ and the defendant receives $u_D(-x)$. Under trial, payoffs are $u_P(\theta_P - \theta_D)$ and $u_D(-(\theta_P - \theta_D))$. Trial imposes no direct costs; the only cost of litigation is the uncertainty about θ_P that both parties bear.

Equilibrium concept. We analyze perfect Bayesian equilibria (PBE) of the settlement bargaining game. A PBE consists of a strategy profile and a belief system satisfying sequential rationality and belief consistency. Let $\beta(\cdot|x)$ denote the plaintiff's posterior belief over Θ_D upon observing offer x. To refine off-path beliefs, we apply the intuitive criterion of Cho and Kreps [1987] and Pareto optimality. For further equilibrium selection, we choose the Myerson [1984] neutral bargaining solution, which generalizes Nash bargaining to incomplete information settings.

4.2 Financing

In anticipation of the future cash flows from the litigation, the plaintiff sells part of his claim. We first analyze a benchmark case with a representative investor who purchases the plaintiff's claim directly. We then extend the analysis to a litigation finance market maker that intermediates between the plaintiff and a continuum of investors.

Representative investor. Before bargaining, the plaintiff can sell a share $\gamma \in [0, 1]$ of future case proceeds to a representative investor I (it). The proceeds include both settlement payments and court awards. If the plaintiff sells share γ at price p per share, he receives γp upfront and retains the fraction $(1 - \gamma)$ of the eventual case outcome. The investor exhibits constant absolute risk aversion $u_I(w) = -e^{-\rho_I w}, \quad \rho_I > 0$, where we assume that $\rho_D, \rho_P > \rho_I$.

The financing stage generates information about case quality in two steps. First, the

investor performs due diligence, evaluating the plaintiff's case and producing a signal

$$s = \theta_P + \varepsilon, \quad \varepsilon \sim \mathcal{N}\left(0, \frac{1}{\alpha}\right),$$

where $\alpha > 0$ is the precision of the signal, reflecting the investor's due diligence capacity. We assume that the investor is uninformed about θ_D, as liability is inherently harder to evaluate and prove than damages. The signal s is observed by the plaintiff, but not directly by the defendant. After observing s, the plaintiff chooses his financing share γ, and the investor sets a price p per unit. The defendant does not observe s directly but can infer it from the publicly observable price p, which is determined by the investor's valuation conditional on s and γ.

Market maker financing. We extend the benchmark to a litigation finance market maker F that intermediates between the plaintiff and a continuum of investors $i \in \mathcal{I}$. Let $m \in \mathcal{M} = \mathbb{R}_+$ denote the mass of investors the market maker attracts. Market makers face costs in attracting investors: identifying suitable matches, deploying information technology infrastructure, and facilitating the sharing of confidential case details under non-disclosure agreements. We model these frictions through a cost function

$$\kappa : \mathcal{M} \to \mathbb{R}_+, \quad \kappa'(m) > 0.$$

We allow for both convex and concave cost structures, capturing economies or diseconomies of scale in investor acquisition. In our base case, costs are linear: $\kappa(m) = \kappa m$ for some $\kappa > 0$.

To share risk optimally, the plaintiff's share γ is distributed equally among the m investors. Each investor i thus acquires exposure $q = \gamma/m$, representing their individual stake in the litigation outcome. Let $Q = mq = \gamma$ denote aggregate demand. The investors perform due diligence on the case quality, generating a signal s. We assume a communication structure analogous to an initial public offering: during a book-building phase, the market maker solicits indications of interest from investors and aggregates their assessments. Through this process, the plaintiff learns the signal s before deciding how large a stake γ to sell. The resulting market price p is publicly observable, allowing the defendant also to infer s.

Timeline. The game unfolds as follows:

(i) *Types.* Nature draws (θ_P, θ_D) from the prior. The defendant observes θ_D; neither party observes θ_P.

(ii) *Due Diligence.* Investors evaluate the case, producing a signal $s = \theta_P + \varepsilon$ observed by the plaintiff and investors.

(iii) *Financing.* Observing s, the plaintiff chooses the share γ to sell.

(iv) *Pricing.* Observing (s, γ), investors price the asset at p. The price p is publicly observable.

(v) *Bargaining.* Observing p, the defendant infers s and bargains over settlement with the plaintiff, with offer x and acceptance probability π.

5 Analysis - Bargaining stage

We proceed by backward induction and characterize the settlement bargaining outcome for a given financing choice γ and signal s. Plaintiffs who utilize litigation finance typically sell a sufficient share of their claim to substantially reduce their effective risk exposure, often to levels at or below that of corporate or insured defendants. Accordingly, we make the following assumption to keep our results analytically tractable:

Assumption 1. *The plaintiff's effective risk aversion does not exceed the defendant's:* $\rho_P(1-\gamma) \leq \rho_D$.

Using the CARA-normal certainty equivalent formula, we also define the conflict-outcome certainty equivalents for the plaintiff and defendant given s as $CE_P^s = \mu_{P,s} - \mu_D + \frac{1}{2}\rho_P(1-\gamma)(\sigma_D^2 + \sigma_{P,s}^2)$ and $CE_D^s = \mu_{P,s} - \theta_D + \frac{1}{2}\rho_D(\sigma_{P,s}^2)$, where we add subscript s to indicate the posterior distribution of θ_P given s.

5.1 Non-cooperative solution

We analyze the signaling game in which the defendant proposes a settlement transfer to the plaintiff. Recall that our equilibrium concept is PBE, combined with the intuitive criterion and Pareto optimality. We characterize all equilibria, and subsequently determine the Myerson neutral bargaining solution.

A fully pooling equilibrium cannot exist. Any pooling offer must compensate the plaintiff for the average defendant type in the pool, but defendant types with sufficiently strong defenses strictly prefer trial to paying that transfer. Such defendants can profitably deviate to a lower transfer, yielding a higher expected payoff independent of acceptance. Conversely, a fully separating equilibrium cannot be sustained either: the incentive constraint must hold for an unbounded type space, yet the acceptance probabilities used to screen types are naturally bounded between zero and one, so full separation is infeasible (see the proof of Proposition 1 for details).

Any equilibrium is therefore semi-separating, characterized by a pooling transfer $\bar{x}$ and a corresponding cutoff $\bar{\theta}_D$ on defendant types. Defendants with types $\theta_D \leq \bar{\theta}_D$ propose

the pooling transfer $\bar{x}$, which is accepted with certainty by the plaintiff. Defendants with types $\theta_D > \bar{\theta}_D$ propose a separating offer $x(\theta_D) < \bar{x}$, which is accepted by the plaintiff with probability $\pi(\theta_D) < 1$. For full separation in the upper region, the mapping $x(\theta_D)$ must be injective, i.e., different types must make different offers.

Beliefs and Incentive Constraints. We first consider the plaintiff. Upon observing a pooling offer $\bar{x}$, the plaintiff infers that the defendant's type is distributed on $(-\infty, \bar{\theta}_D]$. For this pooling region, the settlement must exceed the trial certainty equivalent

$$\bar{x} \geq \mu_{P,s} - \mathbb{E}[\theta_D \mid \theta_D \leq \bar{\theta}_D] - \tfrac{1}{2}\rho_P(1-\gamma)\big(\sigma^2_{P,s} + \mathrm{Var}[\theta_D \mid \theta_D \leq \bar{\theta}_D]\big).$$

Upon observing a separating offer $x(\theta_D)$, the plaintiff accurately infers the defendant's type is θ_D. By mixed strategies for acceptance, the plaintiff must be indifferent for each type in the region. Hence, for the separating region, the transfers are pinned down uniquely by $x = \mu_{P,s} - \theta_D - \frac{1}{2}\rho_P(1-\gamma)\sigma^2_{P,s}$.
For defendant types $\theta_D \geq \bar{\theta}_D$, incentive compatibility requires for all alternative reports $\theta'_D \geq \bar{\theta}_D$ the following condition to hold:

$$\begin{aligned} &\pi(\theta_D)u_D(-x(\theta_D)) + (1-\pi(\theta_D))\mathbb{E}[u_D(\theta_P - \theta_D)] \\ &\geq \pi(\theta'_D)u_D(-x(\theta'_D)) + (1-\pi(\theta'_D))\mathbb{E}[u_D(\theta_P - \theta_D)]. \end{aligned}$$

For all other types, by monotonicity, incentive compatibility follows from the condition for the threshold type $\bar{\theta}_D$. With continuous types, assuming continuity of $\pi(\theta_D)$, the incentive compatible mapping is determined by solving the linear ordinary differential equation.

Equilibrium Characteristics. For the separating region, the equilibrium transfers $x(\theta_D)$ are pinned down completely by the plaintiff's indifference condition. The equilibrium acceptance probability is constrained but not uniquely determined by the defendant's incentive constraints. By Pareto optimality, we can consider the lowest cost equilibrium, i.e., the equilibrium where the probability of acceptance is highest and the defendant's incentive constraint is binding. Derivations solving the linear ordinary differential equation for the corresponding incentive constraints yield the solution up to some constant $A > 0$, specifically $\pi = Ae^{-0.5\sigma_P^2(\rho_D + (1-\gamma)\rho_P)\theta_D}$ with $\pi \leq 1$.

For the pooling region, the plaintiff's incentive constraint for accepting limits the set of feasible pooling transfers from below. As $\bar{x}$ rises, the cutoff $\bar{\theta}_D$ falls, tightening the truncation and lowering both $\mathbb{E}[\theta_D \mid \theta_D \leq \bar{\theta}_D]$ and $\mathrm{Var}[\theta_D \mid \theta_D \leq \bar{\theta}_D]$. Hence both the settlement offer and the trial outside option improve. The proof of Proposition 1 shows that the settlement offer rises faster, so the acceptance condition is satisfied for all $\bar{x}$ above some minimum threshold $x_{\min}$. By the intuitive criterion, it must hold that $x(\bar{\theta}_D) = \bar{x}$. Furthermore, A must be chosen such that $\pi(\bar{\theta}_D) = 1$.

Proposition 1. *There exists a continuous set of perfect Bayesian equilibria satisfying the intuitive criterion and Pareto optimality for each* $\bar{x} \in [x_{\min}, \infty)$ *and a corresponding threshold type* $\bar{\theta}_D = \mu_{P,s} - \bar{x} - \frac{1}{2}\rho_P(1-\gamma)\sigma^2_{P,s}$*, with*

(i) The defendant proposes

$$x(\theta_D) = \begin{cases} \bar{x} & \text{if } \theta_D \leq \bar{\theta}_D \\ \mu_{P,s} - \theta_D - \frac{1}{2}\rho_P(1-\gamma)\sigma^2_{P,s} & \text{if } \theta_D > \bar{\theta}_D \end{cases}$$

(ii) The plaintiff accepts with probability

$$\pi(x) = \begin{cases} 1 & \text{if } x \geq \bar{x} \\ e^{-0.5\sigma^2_P(\rho_D+(1-\gamma)\rho_P)(\bar{x}-x)} & \text{if } x < \bar{x} \end{cases}$$

Proof. See Appendix A. □

Below, a graphical representation is provided:

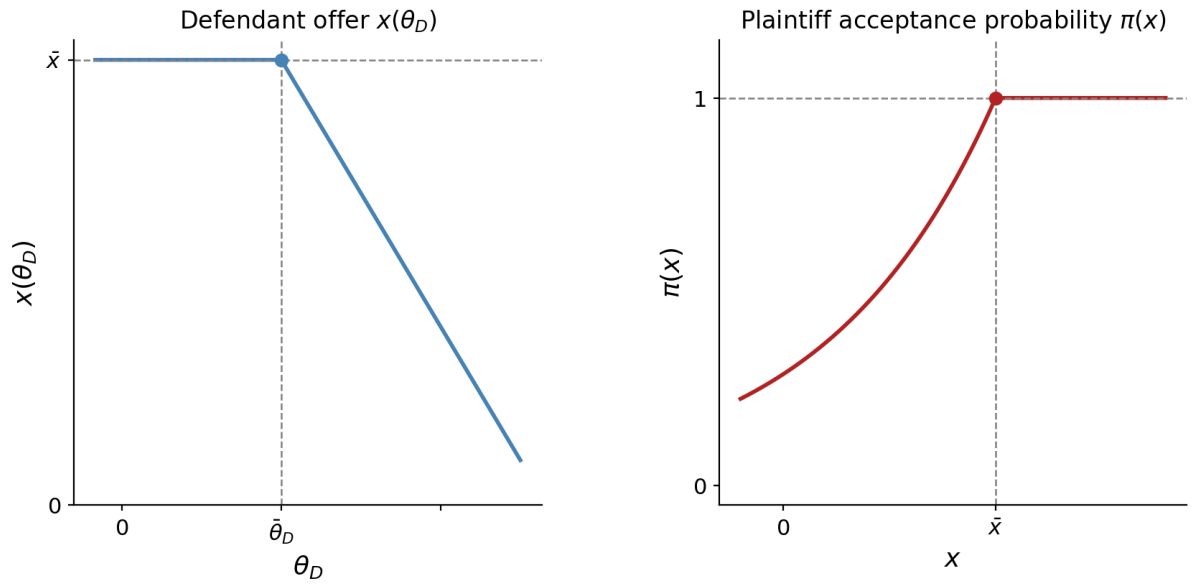


Figure 1: Semi-separating equilibria.

Two features of the equilibrium structure deserve emphasis. First, $x_{\min}$ acts as a lower bound on the pooling offer and hence as an upper bound on the extent of pooling that can be sustained in equilibrium: only offers $\bar{x} \geq x_{\min}$ are consistent with the plaintiff's participation constraint in the pooling region. By contrast, there is no corresponding floor on separation—the separating region $\theta_D > \bar{\theta}_D$ is unbounded above, so the equilibrium accommodates an arbitrarily large degree of type revelation. Second, separation in the upper region is achieved through random acceptance. The resulting positive probability

of trial functions as a costly screening device. From a welfare perspective, trial represents a friction in the legal system: the first-best outcome is settlement, since courts are public goods provided at a cost to society.

5.2 Myerson neutral solution

The classical Nash bargaining solution is not applicable to our setting, as it requires symmetric information between the bargaining parties—a condition violated here by the defendant's private knowledge of θ_D. Myerson [1984] extends cooperative bargaining theory to environments with incomplete information. He proposes three axioms for the solution of a bargaining game. First, *probability invariance* requires that the solution depend only on the decision-theoretically meaningful product of probabilities and utilities, not on the prior probability weighting over types separately, ensuring that the solution treats probability-equivalent bargaining problems identically. Second, *extension* requires that if an incentive-efficient mechanism yields expected utilities at least as high as what the players can obtain from solutions in enlarged versions of the problem (with additional decision options), then that mechanism must itself be a solution—a generalization of Nash's independence of irrelevant alternatives. Third, *random dictatorship* requires that when strongly optimal decisions exist for both players and the equal-probability randomization between them is incentive-efficient, this randomization must be in the solution set, reflecting the equitable principle that each player deserves an equal chance at dictating the outcome. Myerson shows that these three axioms pin down a unique solution correspondence and that each such solution can be characterized as an incentive-compatible and ex-post efficient mechanism that maximizes a weighted sum of virtual utilities, where the type welfare weights are chosen to equalize the players' expected gains.

Myerson bargaining problem. We define a Bayesian bargaining problem accordingly,

$$\Gamma = \big(X, x^c, \Theta_P, \Theta_D, u_P, u_D, p_P, p_D\big),$$

where $X = \mathbb{R}$ is the outcome space of feasible transfers, x^c is the conflict payoff, and p_j denotes the belief of litigant j over their opponent's type. In our setting, private information is one-sided with common priors, so the conditional beliefs are trivial. While the plaintiff's type space Θ_P is part of the problem, it does not directly constrain the allocation of transfers and only affects outcomes through the conflict payoff x^c.

By the revelation principle, we can restrict attention to direct mechanisms where the defendant reports her type truthfully. A direct mechanism $\mu : \Theta_D \times X \to [0, 1]$ specifies for each reported type $\hat{\theta}_D$ a probability distribution over outcomes, satisfying $\int_{x \in X} \mu(\hat{\theta}_D, x)\, dx = 1$. The value $\mu(\hat{\theta}_D, x^c)$ gives the probability of trial, while $\mu(\hat{\theta}_D, x)$ for $x \neq x^c$ gives the density over settlement transfers. Any such mechanism can equivalently

be summarized by two functions: a settlement transfer $x(\hat{\theta}_D)$ and a settlement probability $\pi(\hat{\theta}_D) \in [0,1]$, where $\pi = 1 - \mu(\hat{\theta}_D, x^c)$. The Myerson neutral solution selects a Pareto-optimal and incentive-compatible mechanism that equitably divides the gains from avoiding trial, adjusting for informational asymmetries through virtual utility weights.

In the following, we derive the Myerson neutral bargaining solution, using the mechanism design approach proposed by Myerson. First, we must find all incentive-compatible and ex-post efficient mechanisms. Such mechanisms are determined by maximizing weighted sums of virtual utilities, where virtual utility adjusts actual utility to account for informational rents. Second, among those incentive-efficient mechanisms, the neutral solution equitably divides the gains from cooperation. This is achieved by finding welfare weights such that each party's expected gains from the mechanism, relative to disagreement, are equalized on a common virtual-utility scale.

Incentive compatibility and virtual utilities. We find virtual utilities to determine the Myerson maximization problem over neutral mechanisms. Virtual utilities differ from actual utilities only for the defendant, as we have one-sided asymmetric information. To derive them, we need to determine incentive compatibility. First we consider the defendant's interim utility from the mechanism, depending on both her actual type θ_D and her reported type $\hat{\theta}_D$:

$$U_D(\hat{\theta}_D, \theta_D) = \pi(\hat{\theta}_D) u_D(-x(\hat{\theta}_D)) + \big(1 - \pi(\hat{\theta}_D)\big) u_D^c(\theta_D),$$

where $u_D^c(\theta_D) = \mathbb{E}_s[u_D(\theta_D - \theta_P)]$ denotes the defendant's interim expected payoff from trial. A mechanism μ is incentive compatible if the defendant prefers truthful reporting:

$$U_D(\theta_D, \theta_D) \geq U_D(\hat{\theta}_D, \theta_D) \quad \text{for all } \hat{\theta}_D, \theta_D.$$

An incentive-efficient mechanism is an incentive-compatible mechanism that is Pareto optimal among all incentive-compatible mechanisms.

To derive the virtual utility of the defendant, we use the standard results on the equivalence of incentive compatibility and the envelope condition combined with monotonicity. As usual, we ignore monotonicity for now, confirming it later, and focus on the envelope condition. Consider how the defendant's utility changes with her true type, holding her report fixed. Differentiating U_D with respect to the actual type θ_D and evaluating for truthful reporting $\hat{\theta}_D = \theta_D$, the envelope condition obtains

$$\left.\frac{\partial U_D(\hat{\theta}_D, \theta_D)}{\partial \theta_D}\right|_{\hat{\theta}_D = \theta_D} = (1 - \pi(\theta_D)) u_D^{c\prime}(\theta_D).$$

Settlement utility $u_D(-x(\hat{\theta}_D))$ does not depend on the true type, so only the trial term

contributes. For those realizations of the mechanism, no information rents are generated. When we rewrite the defendant's ex-ante expected utility from truthful reporting to the mechanism $\mathbb{E}\big[U_D(\theta_D,\theta_D)\big] = \int U_D(\theta_D,\theta_D)\, g(\theta_D)\, d\theta_D$, we apply the envelope condition only to the conflict outcome. By the envelope condition, for $\mathbb{E}\big[U_D(\theta_D,\theta_D)\big]$, we get

$$\int_{-\infty}^{\infty} \pi(\theta_D) u_D(-x(\theta_D)) + (1-\pi(\underline{\theta}_D))\, u_D^c(\underline{\theta}_D) + \left[\int_{\underline{\theta}_D}^{\theta_D} (1-\pi(t))\, u_D^{c\prime}(t)\, dt\right] g(\theta_D)\, d\theta_D,$$

where $\underline{\theta}_D$ is the lowest defendant type for which the settlement probability is strictly less than one. By integration by parts and Fubini's theorem, we derive the defendant's virtual utility for trial outcomes as

$$\tilde{u}_D(\theta_D) = u_D(\theta_D) - \frac{1-G(\theta_D)}{g(\theta_D)} u_D'(\theta_D).$$

Designer's problem and semi-separating mechanism. The Myerson neutral bargaining solution maximizes the weighted sum of virtual utilities. By the probability invariance axiom, we normalize the plaintiff's weight to 1 for all types. The designer's objective is

$$\int \Big[\pi(\theta_D)\big(u_P(x(\theta_D)) + \lambda(\theta_D) u_D(-x(\theta_D))\big) + (1-\pi(\theta_D))\big(u_P^c(\theta_D) + \lambda(\theta_D)\tilde{u}_D^c(\theta_D)\big)\Big] g(\theta_D)\, d\theta_D.$$

We conjecture that the optimal mechanism takes a semi-separating form, where the type space of the defendant is partitioned at threshold $\bar{\theta}_D$, with lower types settling through type-dependent transfers and higher types going to trial with positive probability that is decreasing in type.

The semi-separating mechanism μ^* is defined by the threshold $\bar{\theta}_D$ and settlement transfers that match the structure of Proposition 1: defendant types $\theta_D \le \bar{\theta}_D$ pool at a constant transfer $\bar{x}$, while types $\theta_D > \bar{\theta}_D$ separate with linearly decreasing transfers. For settlement outcomes where $\pi(\theta_D) = 1$, the virtual utility adjustment vanishes and the objective involves only actual utilities. The settlement transfer $x(\theta_D)$ for each type maximizes the weighted sum of utilities $\big\{u_P(x) + \lambda(\theta_D) u_D(-x)\big\}$. Under CARA utility, the first-order condition yields

$$x(\theta_D) = \frac{1}{(1-\gamma)\rho_P + \rho_D} \log\left(\frac{(1-\gamma)\rho_P}{\lambda(\theta_D)\rho_D}\right).$$

To generate the pooling-separating pattern from the non-cooperative equilibrium, the

welfare weights take the form of a step function:

$$\lambda(\theta_D) = \begin{cases} e^{\bar{\theta}_D\left((1-\gamma)\rho_P+\rho_D\right)}\lambda_0 & \text{if } \theta_D \leq \bar{\theta}_D \\ e^{\theta_D\left((1-\gamma)\rho_P+\rho_D\right)}\lambda_0 & \text{if } \theta_D > \bar{\theta}_D \end{cases}$$

where $\lambda_0 > 0$ is a constant to be determined. In the pooling region $\theta_D \leq \bar{\theta}_D$, the constant welfare weight (evaluated at the threshold) generates a constant settlement transfer $\bar{x}$. In the separating region $\theta_D > \bar{\theta}_D$, the exponentially increasing welfare weight generates linearly decreasing settlement offers $x(\theta_D) = \mu_{P,s} - \theta_D - \frac{1}{2}\rho_P(1-\gamma)\sigma^2_{P,s}$.

The semi-separating mechanism with pooling below and separation above the threshold matches the structure of the non-cooperative equilibrium from Proposition 1, where lower defendant types pool at $\bar{x}$ and higher types separate with linearly decreasing offers.

Myerson neutral solution. The Myerson neutral solution selects type-dependent weights $\lambda(\theta_D)$ to adjust for informational asymmetries: the defendant knows her type θ_D while the plaintiff faces additional uncertainty. The neutral weights correct for this imbalance. To characterize the solution, we must show that there exist type weights $\lambda(\theta_D)$ such that the semi-separating mechanism simultaneously maximizes weighted virtual utilities and equalizes the sum of weighted interim expected actual utilities between the two players.

Proposition 2. *There exists a unique welfare weight parameter $\lambda_0 > 0$ such that a unique signaling equilibrium with the pooling offer*

$$\bar{x}^M = \frac{1}{(1-\gamma)\rho_P + \rho_D} \log\left(\frac{(1-\gamma)\rho_P}{\bar{\lambda}\rho_D}\right) \quad \textit{with } \bar{\lambda} = e^{\bar{\theta}_D\left((1-\gamma)\rho_P+\rho_D\right)}\lambda_0$$

constitutes a Myerson neutral bargaining solution.

Proof. See Appendix A. □

The Myerson neutral solution is axiomatically founded: it does not presuppose any particular bargaining protocol, but instead selects the outcome that a neutral arbitrator would recommend given the informational asymmetry between the parties. That it coincides with the non-cooperative equilibrium of Proposition 1—where the defendant makes all offers—might appear to reflect the specific protocol assumed there. Pęski [2022] shows this is not the case. He establishes that the Myerson neutral solution is also the equilibrium outcome of a symmetric random-proposer game in which either party may propose a mechanism, rather than a simple transfer. In that setting, with equal proposal probabilities, the equilibrium replicates the neutral solution exactly. Our non-cooperative result therefore does not hinge on one-sided offer-making: the same semi-separating structure—pooling below a threshold, separation above—arises under

a range of bargaining protocols, from fully defendant-driven to fully symmetric. This robustness reflects a deeper feature of the information environment: the shape of the defendant's private information, not the protocol, is what drives the equilibrium structure.

6 Analysis - Financing

6.1 Representative Investor

We first analyze the benchmark case where a single representative investor purchases the plaintiff's claim. This setting isolates the core economic forces—commitment through risk-sharing and price effects—without the complications of investor aggregation. The results derived here serve as building blocks for the market maker analysis in Section 6.2.

Pricing. The representative investor evaluates the litigation asset after observing the signal s and the plaintiff's financing choice γ. Let Y denote the case proceeds per unit of the claim from the bargaining continuation game, with equilibrium payoffs given by the Myerson neutral solution:

$$Y = \begin{cases} \bar{x}, & \text{if settlement occurs,} \\ \theta_P - \theta_D, & \text{if the case proceeds to trial,} \end{cases}$$

where $\bar{x}$ is the equilibrium settlement transfer from Proposition 2. The investor purchases share γ at price p per unit and exhibits constant absolute risk aversion ρ_I. Competitive pricing implies the investor is indifferent between purchasing and the outside option (normalized to zero):

$$p(s, \gamma) = -\frac{1}{\rho_I \gamma} \log \mathbb{E}_s \left[e^{-\rho_I \gamma Y} \right].$$

This certainty-equivalent price decreases in γ: as the investor absorbs a larger share, her risk exposure increases, depressing the price she is willing to pay per unit. The price also depends on the signal s through the posterior distribution of θ_P. A key reference point is the *risk parity* share $\hat{\gamma}$ at which the plaintiff and investor bear equal risk-adjusted exposure:

$$\rho_P(1 - \hat{\gamma}) = \rho_I \hat{\gamma}.$$

Solving yields $\hat{\gamma} = \rho_P/(\rho_P + \rho_I)$. At risk parity, the plaintiff's effective risk aversion on his retained stake $(1 - \hat{\gamma})$ equals the investor's risk aversion on her purchased stake $\hat{\gamma}$. Both parties have identical preferences over settlement versus trial, eliminating any misalignment in how they value the risky litigation outcome.

Lemma 1. *The equilibrium price $p(s, \gamma)$ attains its unique maximum at $\gamma = \hat{\gamma}$.*

Proof. See Appendix A. □

At risk parity, the plaintiff's settlement strategy exactly maximizes the investor's valuation of the claim. Deviations from $\hat{\gamma}$ create preference misalignment: for $\gamma < \hat{\gamma}$, the plaintiff is more risk-averse and settles too readily from the investor's perspective; for $\gamma > \hat{\gamma}$, the plaintiff is less risk-averse and bargains too aggressively. Either direction reduces the price investors are willing to pay.

Optimal financing. The plaintiff's expected utility from the financing and bargaining outcome comes from the underlying distribution of $(\gamma p(s, \gamma) + (1 - \gamma)Y)$ and can be written as

$$\mathbb{U}_P(s, \gamma) = -\left(\mathbb{E}_s\left[e^{-\rho_I \gamma Y}\right]\right)^{\frac{\rho_P}{\rho_I}} \mathbb{E}_s\left[e^{-\rho_P(1-\gamma)Y}\right].$$

The first term captures revenue: the certainty-equivalent price raised to a power reflecting how the plaintiff values cash. The second term captures the plaintiff's utility from the retained stake $(1-\gamma)$. When choosing γ, the plaintiff trades off three effects: (i) a revenue channel from selling additional shares, (ii) a pricing channel reflecting how γ affects the per-unit price through preference alignment, and (iii) an asset channel from owning fewer shares of the underlying claim.

Differentiating the plaintiff's expected utility with respect to γ yields

$$\frac{\partial \mathbb{U}_P}{\partial \gamma} = \mathbb{U}_P \cdot \rho_P \left[\tilde{\mathbb{E}}_{\rho_P(1-\gamma)}[Y - (1-\gamma)\partial_\gamma Y] - \tilde{\mathbb{E}}_{\rho_I \gamma}[Y + \gamma \partial_\gamma Y]\right],$$

where $\tilde{\mathbb{E}}_\rho[\cdot]$ denotes the tilted expectation under risk parameter ρ, $\tilde{\mathbb{E}}_\rho[X] \equiv \frac{\mathbb{E}_s\left[X\, e^{-\rho Y}\right]}{\mathbb{E}_s[e^{-\rho Y}]}$. The tilted expectation reweights outcomes according to their contribution to expected utility under CARA preferences, placing higher weight on states with lower realizations of Y.

It is important to consider the effect of increasing the share sold on future cash flows, that is, $\partial_\gamma Y$. We find the following important intermediate result based on the observations made in Corollary **??**.

Lemma 2. *The tilted expectation of the case proceeds Y is increasing in γ under the plaintiff's risk-neutral exponentially tilted measure:*

$$\tilde{\mathbb{E}}_{(1-\gamma)\rho_P}[\partial_\gamma Y] > 0.$$

Proof. See Appendix A. □

The intuition behind Lemma 2 is subtle because changing γ affects not only the plaintiff's retained risk but also the endogenous pooling transfer $\bar{x}$. Due to the Myerson type weighting with λ_0, the pooling transfer $\bar{x}$ is increasing in γ, so a larger sale share makes the plaintiff bargain more aggressively and raises the censor threshold governing settlement payoffs. Since Y can be written as a deterministic component minus $\max\{\theta_D, \bar{\theta}_D\}$, the randomness coming from θ_D is therefore a censored normal, with the censor point pinned down by $\bar{x}$. The proof exploits this structure by rewriting the truncated-normal term that appears under exponential tilting as the tail of a mean-shifted normal under a different risk-neutral measure. Once expressed that way, the effect of a higher γ is transparent: the direct reduction in the plaintiff's effective risk aversion and the induced increase in $\bar{x}$ both push the tilted expectation of continuation payoffs upward.

Proposition 3. *The plaintiff optimally sells more than the price-maximizing share, for which risk parity would be achieved with the investor:* $\gamma^*(s) > \hat{\gamma}$.

Proof. See Appendix A. □

The result establishes that plaintiffs systematically *oversell* relative to risk parity despite the associated price discount. The economic mechanism is commitment through risk-sharing. By selling shares beyond $\hat{\gamma}$, the plaintiff reduces his effective risk aversion $\rho_P(1-\gamma)$, which hardens his bargaining stance in settlement negotiations. This toughness is credible because it stems from altered incentives, not cheap talk: with less exposure to trial risk, the plaintiff genuinely values certain settlement payments less relative to uncertain trial outcomes, inducing him to demand higher settlements.

The commitment value arises from time inconsistency. Ex ante, before approaching the investor, the plaintiff would like to commit to aggressive bargaining to extract surplus from the defendant. Ex post, during settlement negotiations, high risk aversion would make him accept weak offers to avoid trial uncertainty. Selling shares to the investor resolves this tension by binding the plaintiff to the tougher stance. Although overselling sacrifices per-share price (moving away from $\hat{\gamma}$), the strategic benefit from improved bargaining outcomes more than compensates.

Price effects. Anecdotal evidence from litigation practice suggests that obtaining funding from a litigation finance fund or hedge fund serves as a signal of case quality. Defendants interpret such backing as an indication that sophisticated investors—who conduct extensive due diligence before committing capital—have vetted the claim and found it meritorious. Conversely, plaintiffs view successful fundraising as external validation of their case's strength, reducing their own uncertainty about trial prospects. This dual signaling role raises a natural question: does the price provided by investor due diligence reduce the plaintiff's incentive to derisk through share sales? One might initially conjecture that a plaintiff who has received the imprimatur of professional litigation finance would

feel less compelled to sell shares for risk-reduction purposes, since the signal itself provides a form of insurance against case weakness. However, this intuition proves incorrect. As the following proposition demonstrates, even with the price signal, plaintiffs continue to oversell relative to the risk-parity benchmark. The commitment motive—the desire to credibly signal tough bargaining through reduced risk exposure—dominates any reduction in the derisking motive that the price might provide.

Proposition 4. *Higher price precision increases the optimal financing share:* $\partial_\alpha \gamma^*(s) > 0$ *whenever* $\rho_D > \rho_P(1-\gamma^*)$.

Proof. See Appendix A. □

The result shows that more precise prices—more precise signals about case quality—induce plaintiffs to sell larger stakes. The mechanism operates through the investor's valuation. Higher precision α reduces posterior variance $\sigma^2_{P,s}$, making the litigation outcome less uncertain. At the equilibrium financing level $\gamma^* > \hat{\gamma}$, the investor bears more risk per unit of exposure than the plaintiff (since $\rho_I \gamma^* > \rho_P(1-\gamma^*)$). Variance reduction therefore benefits the investor disproportionately, raising the price she is willing to pay. This higher price amplifies the revenue channel in the plaintiff's optimization, inducing him to sell more shares.

6.2 Market Maker Financing

We now extend the analysis to a litigation finance market maker that intermediates between the plaintiff and a continuum of investors. The key complication relative to the representative investor case is that the market maker must choose how many investors to attract, creating an additional margin of adjustment. Nonetheless, the core results from Section 6—overselling for commitment and amplification through the price—carry over with appropriate modifications. The market maker setting introduces endogenous investor mass $m(\gamma)$ responding to the plaintiff's financing choice.

Investor pricing. The case proceeds remain the same. Equilibrium pricing changes because the mass of investors changes. By the competitiveness of the market and the symmetry of the expected-utility-maximizing investors, all investors hold the same share of the litigation asset. Otherwise, risk would not be optimally shared among investors. Hence, by market clearing, it must hold that $q = \frac{\gamma}{m(\gamma)}$. Furthermore, investors are indifferent between holding the asset at price p and their outside option, which we normalize to zero. The price p satisfies

$$p(s,\gamma,m) = -\frac{1}{\rho_M \frac{\gamma}{m(\gamma)}} \log \mathbb{E}_s \left[e^{-\rho_M \frac{\gamma}{m(\gamma)} Y} \right]$$

Note that this solution coincides with the one found by setting the marginal utility from buying equal to zero. Because of CARA, the derivative of expected utility is proportional to expected utility.

Investor mass. Recall that the market maker attracts investors with linear cost κm. The market maker chooses m to maximize revenue on the market, i.e., the aggregate value of the litigation asset sold, yielding the concave program $\max_m \ \gamma p(s, \gamma, m) - \kappa m$. Using the certainty-equivalent price formula above and differentiating with respect to m delivers the first-order condition

$$\frac{\gamma}{m}\left[p(s,\gamma,m) - \tilde{\mathbb{E}}_{\rho_M \frac{\gamma}{m(\gamma)}}[Y]\right] = \kappa.$$

For the purpose of the subsequent analysis of optimal financing, the optimal mass $m^*(\gamma)$ as a function of γ will be relevant. The optimal financing problem greatly simplifies when $m^*(\gamma)$ is linear because the investors' effective risk aversion remains constant.

Lemma 3. *Define the share sold $\hat{\gamma} \in (0,1)$ that results in risk parity between the plaintiff and the investors by*

$$\rho_P(1-\hat{\gamma}) = \rho_M \frac{\hat{\gamma}}{m(\hat{\gamma})},$$

(i) The share $\hat{\gamma}$ exists and is unique.
(ii) In a neighborhood of $\gamma = \hat{\gamma}$, the optimal mass $m(\gamma)$ is linear in γ.
(iii) The optimal mass $m(\gamma)$ is strictly increasing and convex in γ.

Proof. See Appendix A. □

The risk parity point $\hat{\gamma}$ represents a critical threshold where the plaintiff's remaining risk exposure $(1-\hat{\gamma})\rho_P$ exactly balances the investors' per-capita exposure $\rho_M \hat{\gamma}/m(\hat{\gamma})$. At this point, both parties have identical risk-adjusted preferences over settlement versus trial, creating perfect preference alignment. Lemma 3(ii) establishes local linearity in the investor mass function $m(\gamma)$: small deviations from risk parity do not change settlement incentives to first order, so the market maker's investor recruitment responds proportionally to share changes. Lemma 3(iii) shows that away from $\hat{\gamma}$, the convexity of $m(\gamma)$ reflects how preference misalignment affects investor demand. When $\gamma > \hat{\gamma}$, investors bear disproportionate risk and the toughened settlement stance they induce requires spreading exposure across more investors at an increasing rate. Understanding these properties around risk parity becomes essential for characterizing the plaintiff's optimal financing choice.

Lemma 4. *At $\gamma = \hat{\gamma}$, the equilibrium price $p(s, \gamma, m)$ attains its unique global maximum.*

Proof. See Appendix A. □

Preference alignment at $\hat{\gamma}$ maximizes the asset price because there is no discount from preference misalignment between the plaintiff and investors. When the plaintiff and investors have identical risk-adjusted preferences over settlement versus trial, they value the risky litigation asset identically, eliminating any disagreement about optimal settlement strategy. Away from $\hat{\gamma}$, misalignment creates a wedge: if $\gamma > \hat{\gamma}$, investors are effectively more risk-averse and prefer softer settlement offers than the plaintiff would choose, forcing them to discount the asset's value since the plaintiff's tougher stance increases trial risk. Importantly, when attracting investors beyond $\hat{\gamma}$, the market maker does not overcompensate the increase in variance from bargaining tougher—the price discount from misalignment dominates any gains from spreading risk across additional investors. Conversely, if $\gamma < \hat{\gamma}$, the plaintiff is more risk-averse and chooses softer offers than investors would prefer, creating a different discount as investors disvalue the plaintiff's excessive caution. The price maximum at risk parity reflects investor value being maximized by full alignment with the plaintiff. This insight becomes crucial for understanding why plaintiffs might deviate from $\hat{\gamma}$ in equilibrium—while doing so sacrifices price, it may provide strategic benefits through commitment effects that we explore next.

Plaintiff's utility. The core economic forces identified in Section 6 extend to the market maker setting. As in Proposition 3, plaintiffs oversell for commitment, and as in Proposition 4, more precise prices amplify this tendency. The market maker introduces an additional layer: the endogenous investor mass $m(\gamma)$ responds to γ, creating feedback between financing choices and risk-sharing capacity.

The plaintiff's expected utility from the financing and bargaining continuation games comes from the underlying distribution of $(\gamma p(s, \gamma, m) + (1-\gamma)Y)$ and can be written as

$$\mathbb{U}_P(s, \gamma, m) = -\left(\mathbb{E}\left[e^{-\tilde{\rho}_M Y}\right]\right)^{\frac{\rho_P \gamma}{\tilde{\rho}_M}} \mathbb{E}\left[e^{-\rho_P(1-\gamma)Y}\right].$$

Again, the first term represents the revenue obtained from selling shares γ to the investors, and the second term describes the utility obtained from retaining $(1-\gamma)$ shares.

Optimal financing. Substituting the pricing formula into the plaintiff's utility and differentiating along the equilibrium mass $m(\gamma)$ yields

$$\frac{d\mathbb{U}_P(s, \gamma, m(\gamma))}{d\gamma} = \mathbb{U}_P \cdot \rho_P \Big[\tilde{\mathbb{E}}_{\rho_P(1-\gamma)}[Y - (1-\gamma)\partial_\gamma Y] - \tilde{\mathbb{E}}_{\tilde{\rho}_M}[Y + \gamma \partial_\gamma Y] + \frac{\gamma m'(\gamma)}{m(\gamma)}\big(\tilde{\mathbb{E}}_{\tilde{\rho}_M}[Y] - p(s, \gamma, m)\big)\Big],$$

where the first two terms mirror the representative-investor derivative and the last term captures how investor mass responds to γ. Since $\mathbb{U}_P < 0$, the signs in the bracketed term are reversed when determining welfare effects. Let $\gamma^\star(s)$ and $\hat{\gamma}^{\text{rep}}$ denote the representative-investor optimum and its risk-parity share from Section 6.

Proposition 5. *The plaintiff oversells more in the case of market maker financing. If $\gamma^\star(s)$ lies in a neighborhood of $\hat{\gamma}^{\text{rep}}$, then overselling is strictly larger with the market maker: $\gamma^\star(s,m) > \gamma^\star(s)$.*

Proof. See Appendix A. □

This result extends Proposition 3 to a market maker with endogenous investor mass, and the key change is the separation between total issuance and per-investor exposure. The plaintiff chooses the aggregate share γ, but each investor only bears $\gamma/m(\gamma)$. Near the representative-investor risk-parity point, the market maker can expand $m(\gamma)$ almost one-for-one with γ, so the per-capita exposure rises more slowly than in the single-investor benchmark. The commitment benefit still scales with the total share sold, while the price penalty from preference misalignment is muted by the dilution across investors. This disconnect strengthens the incentive to move past risk parity: overselling is larger than in the representative case when γ is near $\hat{\gamma}^{\text{rep}}$, and the same force persists for slightly larger γ in that neighborhood.

7 Extensions

7.1 Market Maker Fees

To isolate the fee logic, we return to the representative-investor benchmark from Section 6 and let the market maker levy a proportional fee on primary issuance. Let $\phi \in (0,1]$ denote the fraction of issuance proceeds paid to the plaintiff, so the market maker retains $(1-\phi)$. The investor still pays $p(s,\gamma)$ per unit, and the bargaining outcome Y is unchanged. The plaintiff therefore receives the certain transfer $\phi\,\gamma\,p(s,\gamma)$ up front and retains the residual stake $(1-\gamma)Y$.

The plaintiff's expected utility becomes

$$\mathbb{U}_P^{\phi}(s,\gamma) = -\left(\mathbb{E}_s\left[e^{-\rho_I \gamma Y}\right]\right)^{\phi\rho_P/\rho_I} \mathbb{E}_s\left[e^{-\rho_P(1-\gamma)Y}\right],$$

so the fee scales only the revenue channel while leaving the asset channel unchanged. The first-order condition is

$$\tilde{\mathbb{E}}_{\rho_P(1-\gamma)}[Y - (1-\gamma)\partial_\gamma Y] = \phi\,\tilde{\mathbb{E}}_{\rho_I\gamma}[Y + \gamma\partial_\gamma Y],$$

making the trade-off transparent: lowering ϕ attenuates the marginal value of selling shares but does not affect the value of the retained stake.

The qualitative implications mirror the baseline. Higher fees reduce the plaintiff's incentive to sell, but the sensitivity depends on whether he is selling above or below the risk-parity share $\hat{\gamma} = \rho_P/(\rho_P + \rho_I)$. When $\gamma < \hat{\gamma}$, both the revenue channel and the pricing channel push toward a larger issuance, so a fee cut sharply reduces the optimal share. When $\gamma > \hat{\gamma}$, the plaintiff is already overselling to exploit commitment benefits, and that commitment motive is independent of fees. As a result, the financing decision is less fee-sensitive in the overselling region. A market maker that chooses fees to maximize revenue therefore prefers to keep the plaintiff in the overselling region, where fee increases are cushioned by the commitment motive rather than causing a collapse in issuance.

A Proofs

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