How Much Is That Lawsuit in the Window? Pricing Legal Claims

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I. INTRODUCTION

Assessing the value of legal claims is the sixty-four thousand dollar question (no pun intended) of civil litigation. Clients, as every litigator knows, often come into their attorneys' offices with a belief that they know how much their claim is worth. The attorney is then asked to validate that number. Alternately, clients can come to their attorneys with a grievance—I have been injured, a counter-party breached its contract with me, I have been fired, our rainforest has been devastated by a mining company—and ask the attorney for an assessment of how much their grievance might be worth. Contingency lawyers, who function as both attorneys and financiers, must make successful predictions on value in order to remain solvent, let alone to rake in a handsome profit, especially when contingency work is the entirety or the lion's share of their practice.[1]

Various developments in the legal profession and the market for legal services suggest that valuing legal claims may soon further affect additional circles of stakeholders. In the United Kingdom—the jurisdiction that pioneered the globalization of law firms[2] and the liquidity in legal claims[3]—the Legal Services Act recently legalized ownership of law firms by nonlawyers.[4] As with the newfound liquidity of legal claims, here too the United Kingdom is bringing an Australian innovation closer to home. In a closely watched development in Australia, the plaintiffs' firm Slater & Gordon Ltd. became the first-ever publically traded law firm, listing its shares on the Australian Stock Exchange.[5]

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1. *See generally* HERBERT M. KRITZER, RISKS, REPUTATIONS, AND REWARDS: CONTINGENCY FEE LEGAL PRACTICE IN THE UNITED STATES 10–16 (2004) (applying Modern Portfolio Theory to contingency fee lawyering).

2. James W. Jones, Hilderbrandt Int'l, Presentation at the Harvard Law School Symposium on Globalization of the Legal Profession: Perspectives on the Global Law Firm 8 (Nov. 21, 2008), *available at* http://www.law.harvard.edu/programs/plp/pdf/Jones.pdf ("Large UK firms focused on global markets far earlier than most of their US counterparts.").

3. *See* Arkin v. Borchard Lines Ltd., [2005] EWCA (Civ) 655, [17], [38]–[44] (Eng.) (loosening the champerty restriction and facilitating trading in legal claims). Australia actually paved the way, followed closely by the United Kingdom. However, it is the use of ALF in the United Kingdom, the home of the "magic circle" firms that are direct competitors of the "AmLaw 100" firms, that placed competitive pressures on American firms to adopt and advocate for the practice. Maya Steinitz, *Whose Claim Is It Anyway? Third-Party Litigation Financing*, 95 MINN. L. REV. 1268, 1278–82 (2011).

4. Legal Services Act, 2007, c. 29, §§ 71–111 (Eng.) (allowing investment in British law firms).

5. Peter Lattman, *Slater & Gordon: The World's First Publicly Traded Law Firm*, WALL ST. J. L. BLOG (May 22, 2007, 9:19 AM), http://blogs.wsj.com/law/2007/05/22/slater-gordon-the-worlds-first-publicly-traded-law-firm/. Slater & Gordon's fascinating prospectus is available at

This development is likely to place pressure on rules of professional responsibility, which currently prohibit such ownership in all but one jurisdiction (the District of Columbia) of the United States.[6] Indeed, there are lawsuits currently pending in three federal district courts, all filed by the plaintiffs' firm Jacoby & Meyers, against the states of New York, New Jersey, and Connecticut, claiming that state laws that prohibit nonlawyers from owning a stake in law firms unconstitutionally restrict freedom of speech, freedom of association, and interstate commerce.[7] Moreover, experimentations with creative business structures that de facto allow non-lawyers to (indirectly) profit from law firms are already underway in the United States. One example is Clearspire, which describes itself as having "reimagined everything a law firm can be[] [a]nd brought it to life with highly innovative business practices."[8] Specifically, Clearspire is structured as three separate legal entities: a law firm, a service company (owned by nonlawyers), and an IT company.[9] Such indirect or direct investors in law firms that do any measure of contingency work would, one imagines, be intensely interested in placing a value on the legal claims in which the firm has a contingent stake.

Another example is the relationship between Juridica Capital Management, one of the first and largest litigation funding firms to operate in the United States, and the law firm Fields & Scrantom. The relationship has been described as follows:

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http://www.slatergordon.com.au/files/editor_upload/File/Final%20EOP%20Prospectus%20including%20Schedules.pdf.

6. D.C. RULES OF PROF'L CONDUCT R. 5.4(b) (2013); *see also*, Victoria Shannon, *The Funder as Co-Counsel: A Glimpse into the Future of Law Firm Ownership*, MODEL LITIG. FIN. CONT. (Mar. 11, 2003), http://litigationfinancecontract.com/the-funder-as-co-counsel-a-glimpse-into-the-future-of-law-firm-ownership/ (discussing the rule).

7. *See* Jacoby & Meyers, LLP v. Presiding Justices, 847 F. Supp. 2d 590, 591–92 (S.D.N.Y. 2012) (explaining plaintiff's argument); Complaint at 3–4, Jacoby & Meyers Law Offices, LLP v. Justices of the Supreme Court of N.J., No. 11-cv-02866-JAP (D.N.J. May 18, 2011), *available at* http://legalaccessforall.org/wp-content/uploads/2011/05/NJComplaint.pdf (arguing that outside investment should be allowed in the American legal system because current practices are antiquated and perpetuate inequality); Complaint at 3–4, Jacoby & Meyers Law Offices, LLP v. Judges of the Conn. Superior Court, No. 11-cv-00817-CFD (D. Conn. May 18, 2011), *available at* http://forctlawyers.com/wp-content/uploads/2011/05/1-main-Connecticut1.pdf (same argument).

8. CLEARSPIRE, http://www.clearspire.com (last visited Mar. 21, 2013). This narrative goes on to say that in addition to "an entirely new business model," Clearspire has embraced "the end of the billable hour." *Id.*

9. *The New Model*, CLEARSPIRE, http://www.clearspire.com/new-model (last visited Mar. 21, 2013). Clearspire Law Company, LLC "retains sole responsibility for the practice of law," Clearspire Service Company "conducts all activities outside of the law practice," and the IT platform supports both companies. *Id.*

> "[Richard Fields and Timothy Scrantom, co-founders and co-principles of Juridica's investment management arm,] also own[] Washington DC-based firm Fields & Scrantom, one of a selection of firms to which Juridica will supply indirect investment in cases where plaintiffs either cannot have, or do not want, direct investment. Around £40m has been earmarked for this."[10]

Third-party funders of litigation (such as Juridica) are managers of portfolios of litigation and therefore have an obvious stake in the question of how to price legal claims. Litigation-funding firms, some of which are publically traded companies,[11] not only put their own time, efforts, and capital on the line but also solicit capital from investors based on a business model that presumes that funders can—and are good at—assessing the value of the investments they purchase for investors. Therefore, with the litigation-funding industry's recent explosion onto the scene,[12] the circle of those affected by the feasibility of claim valuation has been expanded. But at the heart of legal claim valuation is a conundrum. Many experienced lawyers would agree with both the statement that litigation outcomes are inherently and substantially uncertain and the statement that experienced lawyers can vet and sort promising lawsuits from unpromising ones. Like hard-core pornography, claim value is hard to define, but lawyers believe they know it when they see it.[13]

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10. Caroline Binham, *Juridica Attracts Investment as the First Specialist Litigation Fund to Float in UK*, LAWYER (Jan. 14, 2008), http://www.thelawyer.com/juridica-attracts-investment-as-the-first-specialist-litigation-fund-to-float-in-uk/130705.article.

11. *See* BURFORD, http://www.burfordcapital.com/ (last visited Mar. 21, 2013) (explaining the business model of a litigation-and-arbitration-funding firm operating in the United States); IMF (AUSTRALIA) LTD, http://www.imf.com.au/ (last visited Mar. 21, 2013) (an example of a publicly traded litigation funding firm in Australia); JURIDICA CAP. MGMT. LTD, http://www.juridica.co.uk/about.php (last visited Mar. 23, 2013) (explaining the business model of a publicly traded litigation funding firm in the United Kingdom).

12. *See, e.g.*, Jonathan T. Molot, *A Market in Litigation Risk*, 76 U. CHI. L. REV. 367, 380 (2009) (discussing inter alia the difficulty in pricing litigation risk and suggesting as a solution "an 'after-the-event' insurance policy [for defendants] that would protect [defendants] against a higher-than-expected judgment"); *see also* Michele DeStephano, *Nonlawyers Influencing Lawyers: Too Many Cooks in the Kitchen or Stone Soup?* 80 FORDHAM L. REV. 2791 (2012); Stephen Gillers, *Waiting for Good Dough: Litigation Funding Comes to Law*, 43 AKRON L. REV. 667, 669 (2010) (arguing that courts' concept of champerty has promoted injustice and prevented legitimate investment in legal claims); Deborah Hensler, *Financing Civil Litigation: The US Perspective*, *in* NEW TRENDS IN FINANCING CIVIL LITIGATION IN EUROPE: A LEGAL, EMPIRICAL, AND ECONOMIC ANALYSIS 149, 151 (Mark Tuil & Louis Visscher eds., 2010); Anthony J. Sebok, *The Inauthentic Claim*, 64 VAND. L. REV. 61, 120–32 (2011) (arguing that the notion of "inauthentic claims" is poor justification for preventing outside investment in legal markets); W. Bradley Wendel, *Alternative Litigation Financing and Anti-Commodification Norms*, 63 DEPAUL L. REV. (forthcoming), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2261343 ##.

13. Alluding, of course, to Justice Stewart's famous remark in *Jacobellis v. Ohio*, 378 U.S. 184, 197 (1964) (Stewart, J., concurring). For an illustration of the conundrum, see, for example,

Given the importance of accurate claim pricing, it is unsurprising that scholars have opined on the issue in a variety of contexts and from a variety of perspectives. It would be impossible to do justice to all of them in this Article (though Part III does attempt to categorize the literature in an illuminating way and provide examples of the leading schools of thought). Breaking from previous scholarship, this Article seeks to tackle the issue from a new perspective. It asks how parties to a third-party funding agreement should deal with pricing in their contracts given the inherent difficulty in pricing legal claims.[14] It answers that a practical solution lies with *staged funding* in a manner similar to the funding of start-ups by venture capitalists. This Article focuses on third-party funding, not contingency fees, because staged funding of contingency fees would require careful considerations of various ethics regulations (like a client's control of her case, duty of loyalty, and other requirements). However, many of the underlying considerations would be similar.

This Article is part of a larger project which views the funding of commercial[15] legal claims as similar, in important respects, to portfolio companies and venture capital ("VC"), more so than contingency fees or insurance. In a nutshell, this comparison is appropriate because, given the assets involved, both types of funding are characterized by extreme uncertainty, extreme information asymmetry, extreme agency problems (conflicts of interest and, in

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the following online debate between Mark Bello, the CEO of Lawsuit Financials, and Edward Reilly, the cofounder of Themis Capital, sparked by Reilly's post on the suggestion to use milestones in funded litigation. *See* Maya Steinitz, MODEL LITIG. FIN. CONT., http://litigationfinancecontract.com/ (last visited Sept. 18, 2013) (creating and providing a forum for this debate); Edward A. Reilly, Jr., *Milestones: A Response*, MODEL LITIG. FIN. CONT. (Feb. 18, 2013), http://litigationfinancecontract.com/milestones-a-response/. Mark Bello disagreed with the statement that "litigation values do not fluctuate materially during the course of the case," and stated that "[he has] found, in 36 years of combined legal and legal funding experience, that there are so many intangibles in litigation and so much can happen with evidence and discovery . . . that even excellent underwriting sometimes can't prevent substandard litigation results." Mark Bello, Comment to *Milestones: A Response*, *supra*. Reilly then responded to Bello's comment that "[w]hen compared with the outcomes of venture capital investments, successful outcomes from litigation funding investments are relatively predictable and outcomes are within an identifiable range." Reilly, *supra*.

14. The problem and the solutions offered herein are equally salient to contingency fee arraignments. *See infra* Part II.B for a discussion of how certain standard features in contingency fee arrangements can be understood as rudimentary forms of staging.

15. Commercial legal claims should be distinguished from personal claims, such as personal injuries and divorces, as well as nonpersonal torts, such as environmental torts. For more on that distinction and, in particular, the risk of commodifying these kinds of claims, see Steinitz, *supra* note 3, at 1318–22.

particular, moral hazard),[16] and the problem of effort provision.[17] Therefore, I have previously argued that based on economic theory, VC contracts and the organizational structure of VC firms can provide a model for litigation-funding contracts and firms.[18] In a future piece, a coauthor and I will provide a full model litigation-funding contract that translates this theory into practice by exemplifying, with concrete contractual language and commentary, how parties may adopt and adapt VC contracts to litigation funding.[19] In the current piece, I delve into the financial theory of the hallmark feature of VC: staged funding. I also explore the financial theory of litigation to show how staging can (1) accommodate the uncertain value of legal claims, which can be understood as assets; (2) accommodate the uncertainty

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16. Moral hazard, generally, is a type of agency problem in which one party, the agent, is responsible for the interests of another, the principal, but has an incentive to put its own interests first. *See* Kevin Dowd, *Moral Hazard and the Financial Crisis*, 29 CATO J. 141, 142 (2009). The agent, who is insulated from risk, may behave differently from the way it would behave if it would be fully exposed to the risk. *See id.* In the insurance context, moral hazard refers to "the tendency of insurance protection to alter an individual's motive to prevent loss. This affects expenses for the insurer and therefore, ultimately, the cost of coverage for individuals." Steven Shavell, *On Moral Hazard and Insurance*, 93 Q.J. ECON. 541, 541 (1979).

17. *See* Zsuzsanna Fluck et al., *Venture Capital Contracting and Syndication: An Experiment in Computational Corporate Finance* § 1.1 (Nat'l Bureau of Econ. Research, Working Paper No. 11624, 2005):

> Venture capital brings together one or more entrepreneurs, who contribute ideas, plans, human capital and effort, and private investors, who contribute experience, expertise, contacts and most of the money. For simplicity, we will refer to one entrepreneur and to one initial venture-capital investor. Their joint participation creates a two-way incentive problem. The investor has to share financial payoffs with the entrepreneur in order to secure her commitment and effort. Thus the investor may not be willing to participate even if the start-up has positive overall NPV. Second, the entrepreneur will underinvest in effort if she has to share her marginal value added with the investor.

18. For the full case of this analogy and its analytic implications, see Maya Steinitz, *The Litigation Finance Contract*, 54 WM. & MARY L. REV. 455 (2012) [hereinafter Steinitz, *The Contract*]. I then developed an online platform, *see* Steinitz, *supra* note 13, to "crowd source" litigation-funding contracting—namely, to invite lawyers, funders, clients and others to opine on model provisions and suggest their own.

19. This collaborative piece is forthcoming in M. Steinitz & Abigail C. Field, *A Model Litigation Funding Contract*, IOWA L. REV. (forthcoming 2014) (on file with authors). In it, we bargain "behind a veil of ignorance," to borrow John Rawls's term for his social contract exercise. Namely, we try to devise a hypothetical contract that would be profitable for funders and fair to plaintiffs all the while dancing between the raindrops that are the various regulatory restrictions, including champerty, fee-splitting prohibition, usury prohibition, and more. That hypothetical deal has other important features. On the financial side, it is structured as the sale of securities rather than as a secured loan. It provides for the ability to accelerate and supplement the investment. It provides downside protection to the investors on the one hand and a minimum plaintiff recovery (to avoid unconscionability problems) on the other. It also provides important nonfinancial features such as various representations and warranties, duty to cooperate, a fiduciary duty, and more. *See generally id.*

relating to the ultimate costs of litigation (i.e., transaction costs), which diminish the value of the asset; and (3) address the sequential nature and nonmonotonic value of the *option* to settle. When the pricing of legal claims is adjusted using staging to accommodate for fluctuations in transaction costs and the value of the asset and option, efficiency and fairness are maximized for both the claimant and the financier.

Part II provides a definition of staged funding. Then, by recasting common contingency fee practices as simple (and deficient) forms of staged funding, it argues that staged funding of litigation is not new but rather only underdeveloped. It also provides some evidence that simple forms of staging are used in the newly emerged third-party funding industry. Part III provides a brief overview of the history of the law and economics of claim valuations. It first describes how neoclassical law and economics revolutionized the way we think of legal disputes by conceptualizing them as assets. It then describes how behavioral economics allowed refinement of economic analysis by accounting for actual human behavior. Part III continues by describing how the financial theory of litigation has further advanced our thinking of the economics of litigation by introducing a real options approach. Finally, Part III describes how the accounting world regards lawsuits. Part IV adds another layer by explaining how funding litigation differs from funding start-ups (the focus of VC economics). It then concludes with a description of contract-design choices that may be appropriated in funded litigation that uses staged funding.

II. STAGED FUNDING IN CONTINGENCY CASES AND THIRD-PARTY FUNDING: THE CURRENT STATE OF AFFAIRS

In this Section, I define staged funding; describe current usage; explore how staged funding has the potential to sidestep the impossibility of accurately pricing litigation ex ante by allowing repricing and exit, which are both pegged to information disclosure; and explain the deficiencies and missed opportunities that characterize current practices.

A. Staged Funding Described

Staged funding is an iterative process used to provide the portfolio company with capital in return for ownership (shares) in the company. It allows the company to move from one stage of its

development to the next while allowing funders to minimize risk. Among other things, staging allows both funders and entrepreneurs to learn the value of the investment as well as matters that affect it, such as each party's honesty, its level of effort, the forum in which the litigation is taking place, and other factors. Staged funding assumes that "the entrepreneur and venture capitalist cannot write a complete contract to specify the terms of future financing. The terms are determined by bargaining as financing is raised stage by stage."[20] It thus constitutes the start-up—or in our case, the litigation—as a compound call option.[21]

Options afford a right, but not an obligation, to engage in a future transaction—specifically, to buy or sell an underlying asset at a predetermined price (called the "strike price") on or before a specific date. Options that provide a right to buy an asset are called "call options," whereas options to sell an asset are called "put options."[22] Options often accompany a stock and allow the investor an opportunity to change the term of the stock.[23] The more volatile the underlying asset, the more an option is worth.[24] When purchasing an option, the buyer is "paying money today for the opportunity to make a further investment. To put it another way, the company is acquiring *growth opportunities*."[25] But options "rarely come with a large label attached. Often the trickiest part of the problem is . . . identify[ing an option]."[26] Finally, compound options are options on an option.[27]

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20. Fluck et al., *supra* note 17, § 1.1.2. On the theory of incomplete contracts more generally, see Ian R. Macneil, *Contracts: Adjustment of Long-Term Economic Relations Under Classical, Neoclassical, and Relational Contract Law,* 72 NW. U. L. REV. 854, 886–900 (1978); Ian R. Macneil, *Reflections on Relational Contract Theory After a Neoclassical Seminar*, *in* IMPLICIT DIMENSIONS OF CONTRACT 207, 207–17 (David Campbell et al. eds., 2003) (explaining the perspective of relational contract theory). On litigation financing and incomplete contracts, see Steinitz, *The Contract*, supra note 18.

21. Fluck et al., *supra* note 17, § 1.1.2.

22. *See generally* STEWART C. MYERS & RICHARD A. BREALEY, PRINCIPLES OF CORPORATE FINANCE 539–94 (7th ed. 2003) (explaining the concepts and theories of corporate options). Common stocks are call options written on a firm's assets. *Id.* at 582.

23. *Id.*

24. *Id.* at 581. More generally, an option's value is influenced by the following:

> [T]he higher the price of the asset, the more valuable an option to buy it. The lower the price that you must pay to exercise the call, the more valuable the option. You do not need to pay the exercise price until the option expires. This delay is most valuable when the interest rate is high. . . . Finally, a long-term option is more valuable than a short-term option. A distant maturity delays the point at which the holder needs to pay the exercise price and increases the chance of a large jump in the stock price before the option matures.

Id. at 591.

25. *Id.* at 563.

26. *Id.* at 575.

Real options provide a new and productive way to view corporate investment decisions as options. Multistage or sequential investment decisions are an important class of real options with embedded managerial flexibility. These multistage real options involve a bundle of interrelated investment opportunities, with the early upstream opportunities creating potentially valuable discretionary downstream opportunities.[28]

Staged funding occurs in a series of investment rounds, each corresponding with business milestones such as the completion of a business plan, the demonstration of technology, or the introduction of a product into the market. At each stage, the project is valued anew, and shares are issued in exchange for additional funding.[29] In return for its investment, the venture capitalist usually receives convertible preferred stock at each round. This means that if the company is terminated, the venture capitalists have a senior claim on its assets. If the firm is successful and is taken public or sold, the shares convert to common stock.[30] The number of shares received at each round is determined by a valuation of the project conducted during that round. Each round is done through a separate contract, and the new shares are identified as Series A, Series B, and so forth.

VC virtually never proceeds through secured lending.[31] The current practice[32] in litigation funding, conversely, seems to be a type

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27. *Id.* at 1041.

28. Hemantha S.B. Herath & Chan S. Park, *Multi-Stage Capital Investment Opportunities as Compound Real Options,* 47 ENGINEERING ECONOMIST 1 (2002) (emphasis added).

29. George W. Fenn et al., *The Economics of the Private Equity Market*, *in* 168 BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM: STAFF STUDIES (1995); Fluck et al., *supra* note 17, § 1 (citing earlier work on staged funding, including PAUL A. GOMPERS & JOSH LERNER, THE VENTURE CAPITAL CYCLE (2006); Paul A. Gompers & Josh Lerner, *The Use of Covenants: An Empirical Analysis of Venture Partnership Agreements*, 39 J.L. & ECON. 463 (1996); Paul A. Gompers, *Optimal Investment, Monitoring and the Staging of Venture Capital*, 50 J. FIN. 1461 (1995); Thomas Hellmann & Manju Puri, *The Interaction Between Product Market and Financing Strategy: The Role of Venture Capital*, 13 REV. FIN. STUD. 959 (2000); Thomas Hellmann & Manju Puri, *Venture Capital and the Professionalization of Start-up Firms: Empirical Evidence*, 57 J. FIN. 169 (2002); Steven Kaplan & Per Strömberg, *Financial Contracting Theory Meets the Real World: An Empirical Analysis of Venture Capital Contracts*, 70 REV. ECON. STUD. 281 (2003); Josh Lerner, *The Syndication of Venture Capital Investments*, 23 FIN. MGMT. 16 (1994); William A. Sahlman, *The Structure and Governance of Venture Capital Organizations*, 27 J. FIN. ECON. 473 (1990)).

30. Fluck et al., *supra* note 17, § 1.1.2.

31. *Id.*

32. Based on multiple discussions between the author and funders. The explanation would seem to be path dependency. Commercial litigation funding has its roots, inter alia, in consumer funding, and those have to be carried out as nonrecourse lending (for reasons that are beyond the scope of this paper). For a description of the evolution of the consumer-funding industry, see

of lending—nonrecourse lending—coupled with very basic forms of staging. At milestones within a staged-funding round, funders can purchase additional shares based on the valuation and purchase price used at the beginning of the round.[33]

Critically, in VC, the rounds and milestones correspond with points at which the information, and therefore the risk profile, significantly changes. Since the value of the start-up progressively grows over time (or else the start-up fails and is terminated), staging allows for new valuations in each round and a new share purchase price that reflects the new information, such that both the entrepreneur and the funder can get appropriate value. The venture capitalists obtain some, but not entire, control over the start-up. In particular, they gain the ability to shut down the enterprise if it seems like a losing proposition.[34] Thus, in addition to tying pricing to information disclosure, staged funding also ties exit to information disclosure. As such, staged financing addresses information asymmetry and extreme uncertainty by allowing the funder to either reassess the extent of its involvement based on an updated valuation as more information is revealed, or simply decline to participate further. Staged financing also addresses agency costs: the risk of losing future funding incentivizes entrepreneurs to cooperate and expand efforts. The iterative nature of staged funding allows the parties to increase or decrease expenditures as necessary. Staged funding can provide all of these benefits to the funding of litigation.

However, staging comes with a price: it creates a holdup problem. The holdup problem arises due to the disproportionate bargaining power the funder has by virtue of its ability to shut down the company by ceasing funding. A monopolist funder may hold up the claimant at each valuation negotiation.[35] Research indicates that

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Nora Freeman Engstrom, *Lawyer Lending: Costs and Consequences*, 63 DEPAUL L. REV. (forthcoming 2014).

33. *See* Kaplan & Strömberg, *supra* note 29, at 283 n.4. Various cash flow and control rights can be contingent on various milestones being met within a given financing round. *Id.* However, pricing appears stable within a round. *See id.*; *see also* Antonio Davila et al., Staging Venture Capital: Empirical Evidence on the Differential Roles of Early Versus Late Rounds 2 (Feb. 2003) (unpublished manuscript), *available at* http://apps.olin.wustl.edu/workingpapers/pdf/2003-07-003.pdf.

34. Fluck et al., *supra* note 17, at 4; Kaplan & Strömberg, *supra* note 29, 288–89 tbl.2 (regarding level of control).

35. *Cf.* Fluck et al., *supra* note 17, at 11; Carsten Bienz & Julia Hirsch, *The Dynamics of Venture Capital Contracts* (Ctr. for Fin. Stud., Working Paper No. 2006/11, 2006), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=675669 (documenting that contracts between venture capitalists and their portfolio firms specify more complete conditions for future financing for firms that have no suitable outside financing option and therefore lower ex post bargaining

staged funding by monopolist VC funds produces suboptimal outcomes, meaning companies that would have succeeded can ultimately fail due to holdup.[36] One could speculate that a similar problem of meritorious claims being prematurely terminated may develop in funded litigation.

The existence of multiple funders participating in later rounds (syndication), resolves holdup and increases an entrepreneur's—or in our case, the plaintiff's—ability to gain from improved information, as well as from its efforts to enhance value in between funding rounds. Competition in funding redistributes the bargaining power between the funder and the funded.[37] Research shows that the entrepreneur's ownership share increases with the value of the project when later stages of the investment are syndicated.[38] Here too, one could speculate that staging and syndication may have similar claimant-favoring redistributive effects if properly structured in litigation funding.

B. Staged Funding in Contingency Fees and Contemporary Third-Party Funding

Staging, albeit not thus conceived of, is common when lawyers invest in lawsuits via contingency arrangements. Typically, such arrangements involve incremental expenditures by the lawyers; an increasing stake in the proceeds that is pegged to milestones (usually pretrial, posttrial, and appeal); and a right to exit (e.g., a right not to represent at trial or in an appeal).[39] For example, an ABA publication provides a Standard Contingent Fee Engagement Letter that contains the following clause (titled "Legal Fees, Expenses and Billing"):

> Instead of the usual fee arrangement, [Client] has requested [Law Firm Name] to provide representation for a contingency fee. [Client] agrees the fee shall be [number]% of all sums recovered from the time of commencement of trial or arbitration hearing through verdict, award or decision; [number]% of all sums recovered thereafter if an

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power). The authors' result is consistent with theories of holdup, where complete contracts protect the entrepreneur from expropriation by the financier. *Id.*

36. *See* Fluck et al., *supra* note 17, at 11–13, 25.

37. *See id.* at 14.

38. *Id.* at 4, 14, 16 (noting that competitive syndication of a second round of financing better protects the entrepreneur from share dilution).

39. In addition, "[s]ome lawyers have a client sign what effectively is an option for the lawyer to handle the case, which gives the lawyer the authority to conduct investigatory activities but allows the lawyer to decide to drop the case depending on the results of the investigation." *See* KRITZER, *supra* note 1, at 114.

> appeal is undertaken; and [number]% of all sums recovered if the matter is later retried.[40]

This is phased capital infusion. The same form also provides for termination rights "if [Client] fails to cooperate, if [Client] misrepresents material facts, [or] if [Client] fails to follow the advice of [Law Firm Name]."[41] This allows the attorney to cut her losses as information about the case and the client's efforts is revealed.

The same publication also provides for the following form of phased capital infusion in a standard form (titled "Complex Sliding-Scale Contingency Fee in Commercial Litigation; Partial Assignment of Cause of Action; Complex Agreement Regarding Fees if Engagement is Settled or Terminated Early"):

> [Law Firm Name] will receive twenty percent (20%) of the gross sum recovered by settlement before commencement of trial. After commencement of trial, [Law Firm Name] will receive the following percentages of the gross sum recovered by settlement or judgment: 1. Twenty-five percent (25%) of the first $7 million plus, 2. Thirty-three and one-third percent (33.3%) of amounts recovered that exceed $7 million.[42]

This form provides for more elaborate termination rights for the lawyers and, therefore, greater control over the course of the litigation and settlement decisions. In addition to the termination rights above, it allows the lawyers to terminate the engagement

> if the client elects to abandon any cause of action that in the opinion of the [law firm] materially jeopardizes the prospects of successful prosecution of Client's claims; should the conduct of the Client materially prejudice the prospects of successful prosecution of Client's claims; [] Change of ownership of the Client . . . Should the Client unreasonably withhold consent to a settlement proposal that in the judgment of [the law firm] is a fair and reasonable basis for disposition of the cause . . .Filing of a bankruptcy proceedings by or against any Client . . . Should it become the opinion of [the law firm] at any time that Client's cause of action lacks merit (for example, because of inability to verify Client's claims through witnesses[,] because of adverse developments in the law or because of a materially adverse change in the financial condition of the defendant).[43]

The nascent third-party funding industry lacks transparency, and the content of funding agreements, in particular, is highly guarded proprietary information.[44] Therefore, it is impossible to generalize what are common practices. But at least one contract that made it into the public domain—and which is understood to, generally

40. GARY A. MUNNEKE & ANTHONY E. DAVIS, THE ESSENTIAL FORMBOOK: COMPREHENSIVE MANAGEMENT TOOLS FOR LAWYERS 191 (2001 & Supp. 2007) (Form 6).

41. *Id.* at 193.

42. *Id.* at 225–26.

43. *Id.*

44. *See* Steinitz, *The Contract*, *supra* note 18, at 12.

speaking, be representative of industry standards[45]—contained the following form of staging:

> The Capital Commitment shall be funded . . . in the following Tranches: (i) An initial Tranche in the amount of $4,000,000[;] (ii) A second Tranche in the amount of $5,500,000[; and] A third Tranche in the amount of $5,500,000 . . . [T]he Claimants shall have the right to call two additional Tranches . . . thirty days prior to the date in which [counsel] reasonably believes that the balance . . . will fall below $1,000,000.[46]

The agreement goes on to condition the second tranche on various steps that will potentially bind all members of the class (group) in the underlying litigation, ensure that lawyers under the control of the funders receive full reign, and require establishment of trusts that hold certain litigation rights and proceeds. In other words, there is a requirement that various risks have to be reduced—via meeting certain milestones—before additional funds are released.

The agreement also includes termination rights in case of breach of a material condition or noncompliance with representation and warranties that result in "a material adverse impact on the value of the claim and the recovery amount."[47] Among the conditions identified as material are a duty to instruct the lawyers to provide the funder with any and all material documentation, documents, and written advice of counsel; a duty to respond to reasonable requests for material information;[48] a duty to irrevocably instruct counsel to keep the funder fully and continually informed of all material developments; and a duty to cooperate and devote sufficient time to the claim.[49] Material representations and warranties include any representation relating to conduct that would materially affect the

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45. This is Burford Capital's investment in a group claim (similar to a class action) of Ecuadorians against Chevron, which I have discussed at length elsewhere. *See id.* Fortune magazine described this investment in the following terms:

> [Burford is] the largest and most experienced international dispute funder in the world," as its promotional materials state, so we're not looking here at some aberrational outlier in the field . . . . [And,] we can be assured that Burford's conduct probably represents the very best practices the young industry has to offer.

Roger Parloff, *Have You Got a Piece of This Lawsuit?*, FORTUNE (May 31, 2011, 5:00 AM), http://features.blogs.fortune.cnn.com/2011/05/31/have-you-got-a-piece-of-this-lawsuit. Anthony Sebok, "who has made a subspecialty of probing the legal and ethical questions surrounding litigation finance," has been quoted as saying that there is "nothing unusual from [the] point of view of the litigation finance world" in this contract. Daniel Fisher, *Litigation-Finance Contract Reveals How Investors Back Lawsuits*, FORBES (June 6, 2011, 7:12 AM), http://www.forbes.com/sites/danielfisher/2011/06/07/litigation-finance-contract-reveals-how-investors-back-lawsuits.

46. Burford Funding Agreement between Treca Financial Solutions and Claimants § 2 (Oct. 31, 2010) (on file with author).

47. *Id.* § 11.

48. *Id.* § 13.1(a)–(d).

49. *Id.* § 5.1.

claim, guarding against the possibility that the funder receives a lesser proportion of the award than he had bargained for, and any assurance against the claim being impaired or voided. Importantly, the latter includes a representation and warranty that:

> Claimant has disclosed to Funder all documentation and other information in its possession or control relevant to the Claim and there is no information in the knowledge, possession or control of the Claimants [sic] . . . that is or is reasonably likely to be material to the Funder's assessment of the Claim that has not been disclosed to the Funder, and the Claimant believes . . . that the Claim is meritorious and likely to prevail.[50]

In other words, these arrangements set up iterative investments and allow the investor (whether lawyer or financier) to exit the investment and, therefore, to control risk. In the case of the third-party funding agreement, exit is tied to information disclosure, effort provision, and a material change in claim value.

Notably, all of the above examples share an important characteristic: they fail to allow repricing based on the new information. It goes without saying that they therefore do not allow the plaintiff (as opposed to funder and attorney) to benefit from the new information and incorporate it into the price of the asset being sold. This is so even when parts of the asset (i.e., the additional percentages the attorney gets as the litigation progresses) have not yet been transferred. The plaintiff is similarly deprived of an opportunity to capture any part of any value enhancement that may be due to its efforts (thus disincentivizing efforts, to the detriment of all involved) or to exogenous factors (e.g., a fortuitous value increase due to case developments, such as opposing party's diminished ability to pursue its case). The funder, similarly, cannot bargain for a better price based on new information regarding higher risk. Its only option is to terminate rather than to negotiate for a higher return. Last but not least, holdup in the examples above is facilitated rather than mitigated.

In sum, while current forms of staged funding allow some downside protection to funders (lawyers and financiers), they fail to provide plaintiffs with the benefits afforded to entrepreneurs in the VC context. In other words, the examples above illustrate that current practices do a poor job of addressing the true complexity of valuing legal claims and miss out on opportunities to maximize efficiency for all parties.

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50. *Id.* § 10.2(*l*).

The next Section more fully explains the sources and the difficulty of pricing litigation, reconceived as a (somewhat) liquid asset—namely, one that can be traded. The next Section also suggests how to adapt the sophisticated form of staged funding familiar in VC to litigation funding.

III. LEGAL CLAIMS AS ASSETS AND THE OPTION TO SETTLE (A VERY BRIEF HISTORY OF THE LAW & ECONOMICS OF CLAIM VALUATION)

Funded litigation has either two or three types of investors. First is the plaintiff.[51] Second are the third-party funders. And third are the litigators if their fees are fully or partially contingent on the outcome of the litigation. Pricing, obviously, is a material term at the very core of any commercial transaction, and the joint venture between these investors is no exception. In this regard, the coventurers are confronted with an important threshold question: whether they can price the claim with some degree of confidence in the soundness of their prediction regarding the claim value, and, if not, how to devise an "incomplete contract" that allows them to reprice with minimum transaction costs.[52]

First, it must be understood that the value of a lawsuit to the investors is actually affected by three related but distinct components. The first is the value of the "claim" as that term is used in the Federal Rules of Civil Procedure: "any right to relief . . . arising out of the same transaction, occurrence, or series of transactions or occurrences."[53] This is the terminal, or expected, value of the claim[54] and is the number that the Federal Rules of Civil Procedure expect the litigant and her lawyer to put down in good faith as the relief sought in a complaint.[55] The claim is the *asset* in which a funder is purchasing "shares" (and is thus equivalent to a company that is issuing stock). The second component is the value of the *option* to

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51. On plaintiffs as investors in their own lawsuit, see *infra* text accompanying note 76.

52. On incomplete contracts, see *supra* note 20.

53. FED. R. CIV. P. 20(a)(1)(A). The subject of this rule is permissive joinder, but the rule also relates to the idea of claims as all causes of action arising from a related set of facts and for which relief can be sought. This idea is expressed throughout the Federal Rules of Civil Procedure. *See, e.g.*, FED. R. CIV. P. 8(a) (pleading requirements); FED. R. CIV. P. 12(b) (defenses).

54. *See generally* George L. Priest & Benjamin Klein, *The Selection of Disputes for Litigation*, 13 J. LEGAL STUD. 1 (1984).

55. *See* FED. R. CIV. P. 8(a) (requiring that a claim for relief must contain a demand for the relief sought); FED. R. CIV. P. 11 (stating that by signing a complaint, the party is certifying that the claims are supported by nonfrivolous arguments and have evidentiary support).

settle.[56] As discussed below, the option value is not the same as the claim value, though the two are related. The third and final component is the value of transaction costs: the costs that are involved in effectuating a payment on the claim or option. One must deduct the transaction costs from the value of the claim or the option. As discussed below, the key feature of litigation investment is the uncertainty relating to the value of all three of these components.

The following subsections provide a brief overview of three law-and-economics schools of thought as they relate to valuation of legal claims and settlements. The purpose of this exposition is not to take sides in the academic feuds between the various schools. Rather, it is to show how each advanced the way we think about lawsuits as assets or investments. Neoclassical law and economics opened the door analytically and sensitized lawyers and judges, sociologically speaking, to the commodification of legal disputes. Behavioral law and economics then injected the real world into the analysis by focusing on how humans actually behave. Lastly, financial theory similarly presented nuance and complexity by introducing the contemporary understanding of a real options approach.

A. Expected Claim Value and Settlements in Neoclassical Law & Economics

Neoclassical (traditional) law and economics was first to conceive of legal disputes as monetizable assets; it viewed them as commodities, as opposed to, say, relationships. In a seminal piece, Priest and Klein developed a mathematical model of rational decisionmaking under uncertainty to address the relationship between disputes that proceed to trial and those that settle. Their model predicted that litigants will compare the financial value of a settlement offer to the expected financial value of trial and, of the two, select the course of action with the greater expected value. Accordingly, their model also predicted that trials will occur between risk-neutral parties only when the difference between the parties'

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56. *See* Bradford Cornell, *The Incentive to Sue: An Options-Pricing Approach*, 19 J. LEGAL STUD. 173 (1990) (analyzing litigation under realoptions finance theory); Joseph A. Grundfest & Peter H. Huang, *The Unexpected Value of Litigation: A Real Options Perspective*, 58 STAN. L. REV. 1267, 1272–73 (2006) (discussing the use of real-options theory to analyze litigation as a substitute for traditional, net-present-value approaches); Robert J. Rhee, *The Effect of Risk on Legal Valuation*, 78 U. COLO. L. REV. 193 (2007) (using option theory to analyze litigation).

projected risk-adjusted outcome of trial exceeds their joint costs of proceeding to trial.[57]

Thus, according to this view, the expected value is readily calculable.[58] Since the probabilistic value of the lawsuit can be calculated, settlement is better because litigants can save the cost of litigation:

> [I]f the plaintiff and the defendant have the same beliefs about the trial outcome, then there should always exist mutually beneficial settlements, because they can each escape trial costs by settling. . . . [A] mutually beneficial settlement exists as long as the plaintiff's estimate of the expected judgment does not exceed the defendant's estimate by more than the sum of their cost of trial.[59]

For our purposes, Priest and Klein's model means that when considering whether to proceed to trial, a plaintiff and its business partner, the funder, should multiply the expected damage award by the probability that the court will award it, subtract the anticipated litigation costs, add settlement costs, and subtract opportunity gains from receiving payment now as opposed to a judgment later.[60]

The methodology used by Priest and Klein, and by much of the traditional law-and-economics literature, is that of modeling—making multiple simplifying assumptions to isolate the variable the researcher wishes to test. [61] Some of their assumptions were alluded to above: that both parties are risk neutral and that both have the same beliefs about the trial outcome. Also, importantly, they assume that

> the determinants of settlement and litigation are solely economic, including the expected costs to parties of favorable or adverse decisions, the information the parties possess about the likelihood of success at trial, and the direct costs of litigation and settlement. The most important assumption of the model is that potential litigants form rational estimates of the likely decision, whether it is based on applicable legal precedent of judicial or jury bias.[62]

Generally, then, the central premise of neoclassical economic analysis in this context is that the expected value of a lawsuit is defined as the

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57. *See generally* Priest & Klein, *supra* note 54.

58. *See* Russell Korobkin & Chris Guthrie, *Psychology, Economics, and Settlement: A New Look at the Role of the Lawyer*, 76 TEX. L. REV. 77, 78–79 (1997) (critiquing Priest & Klein and their progeny).

59. STEVEN SHAVELL, FOUNDATIONS OF ECONOMIC ANALYSIS OF LAW 402–03 (2004).

60. *Cf.* Alan E. Friedman, Note, *An Analysis of Settlement*, 22 STAN. L. REV. 67, 80 (1969) (providing this formula for a plaintiff to compute his bargaining limit).

61. Additional examples of modeling various steps of the litigation process include Bruce L. Hay, *Effort, Information, Settlement, Trial*, 24 J. LEGAL STUD. 29 (1995) (modeling discovery) and Steven Shavell, *The Appeals Process as a Means of Error Correction*, 24 J. LEGAL STUD. 379 (1995) (modeling appeals).

62. Priest & Klein, *supra* note 54, at 4.

probability of judgment multiplied by the expected damage award.[63] In other words, a legal claim is an asset, and litigation is understood as an investment.[64] The effects of risk or uncertainty are reflected in this model through changes in the relevant discount rate, such that the riskier the project, the higher the discount rate. (Such models, therefore, are described as discounted cash flow ("DCF") or net present value ("NPV") models.)[65]

Critically, under this traditional simple model of litigation investment, "[i]n deciding whether to sue or whether to settle, the litigants consider the costs and benefits under the assumption that they must either settle promptly or go to trial. There are no intermediate decisions to be made along the way."[66] This feature of the traditional model has stark and important implications: lawsuits are only expected to be filed if their expected value is positive, and they will be settled before trial unless the plaintiff's estimates of the expected judgments exceed the defendant's by at least the sum of their legal costs.[67] Simply put, a trial is an error.[68]

B. Financial Theory of Litigation

Over the past few decades, however, the investment world has vastly expanded on expected value analysis by introducing a new understanding of a real options approach.[69] Real options are options to modify projects. They reflect the fact that managers manage assets rather than hold them passively.[70] Real options include the option to expand, to wait and learn more before investing, to shrink or abandon

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63. *See id.*; *see also* John P. Gould, *The Economics of Legal Conflicts*, 2 J. LEGAL STUD. 279 (1973); William M. Landes, *An Economic Analysis of the Courts*, 14 J.L. & ECON. 61 (1971); Richard A. Posner, *An Economic Approach to Legal Procedure and Judicial Administration*, 2 J. LEGAL STUD. 399 (1973); Steven Shavell, *The Social Versus the Private Incentive to Bring Suit in a Costly Legal System*, 11 J. LEGAL STUD. 333 (1982) (demonstrating the divergence between private and social goods in litigation and adopting a general model of the economics of litigation).

64. To clarify, this means an investment by the *plaintiff*, not by third parties.

65. Grundfest & Huang, *supra* note 56, at 1272–73.

66. Cornell, *supra* note 56, at 173.

67. Steven Shavell, *Suit Settlement and Trial: A Theoretical Analysis Under Alternative Methods for the Allocation of Legal Costs*, 11 J. LEGAL STUD. 55, 58 (1982).

68. *See* SHAVELL, *supra* note 59, at 403 ("A mutually beneficial settlement amount exists as long as the plaintiff's and defendant's estimates of the expected judgment do not diverge too much.").

69. Grundfest & Huang, *supra* note 56, at 1273 (discussing the "real options" approach as a supplement for expected value analysis).

70. MYERS & BREALEY, *supra* note 22, at 268–69.

the project, or to vary output or production methods.[71] Economic analysis of law lags behind in incorporating the insights generated by financial theory, but in the past two decades a few scholars have started to apply finance theory to litigation and claim valuation.[72] This new school of thought posits that rather than understanding litigation as an asset to which asset-pricing theory should be applied, the better view is to conceptualize litigation as an option, specifically as an in-the-money call option.[73]

Finance theory recognizes that most investments involve a series of options. Therefore, the key departure from the traditional view is in accounting for the sequential nature of decisionmaking in litigation.[74] Filing a suit is similar to purchasing an option because the former gives a plaintiff the right to proceed to trial or to settle. Once the suit is filed, the plaintiff also has various other options prior to the key decision of whether to settle. These other options include whether to file certain motions, whether and how to conduct discovery, and other strategic decisions. These real options affect the value of a lawsuit, and financial theory is better equipped to account for this effect:

> The interest in real options theory arises, in part, because traditional discounted cash flow (DCF) approaches to the appraisal of capital-investment projects, such as the standard net-present-value (NPV) rule, cannot properly capture management's flexibility to adapt [] to unexpected market developments. Real options analysis solves this problem by integrating the investment manager's ability to adapt new information into the model itself. While the traditional DCF and NPV approaches assume a fixed commitment to full investment at the outset, real option theory models the investment process as a series of decision points at which investors have the option of adjusting their investments in response to new information. This perspective supports the insight that *investment projects that can easily be modified . . . are more valuable than those that do not provide such flexibility. The more uncertain the outlook, the more valuable this flexibility becomes.*[75]

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71. *Id.* at 269–73, 617.

72. *See* Oren Bar-Gill, *Pricing Legal Options: A Behavioral Perspective*, 1 REV. L. & ECON. 203 (2005); Cornell, *supra* note 56 (discussing the first application of option analysis to legal bargaining); Grundfest & Huang, *supra* note 56; Peter H. Huang, *Lawsuit Abandonment Options in Possibly Frivolous Litigation Games*, 23 REV. LITIG. 47 (2004); Robert J. Rhee, *A Financial Economic Theory of Punitive Damages*, 111 MICH. L. REV. 33 (2012); Rhee, *supra* note 56.

73. To be precise, positive expected value lawsuits are analogous to in-the-money call options and negative expected value lawsuits are analogous to out-of-the-money call options. *See* Grundfest & Huang, *supra* note 56, at 1277. "When a lawsuit is filed, the defendant is forced to write litigation options at prices that depend on the plaintiff's cost of pursuing the suit. The value of the options . . . depends on an interaction between the specific characteristics of the case and the rules for civil procedure." Cornell, *supra* note 56, at 175.

74. Cornell, *supra* note 56, at 174.

75. Grundfest & Huang, *supra* note 56, at 1273–74 (emphasis added) (citations omitted) (internal quotation marks omitted). In other words, "DCF does not reflect the value of

Thus, viewing lawsuits as investments and applying finance theory to the valuation of these investments has created exciting possibilities. For example, lawsuits can be viewed as similar to research and development ("R&D") projects because both involve the search for new information and allow for adjustment of strategies in response to the revelation of new information.[76] Thus, third-party funding can be compared to VC investment in R&D-intensive start-up companies.[77] Specifically, researchers and, more relevant to the view advanced herein, start-up companies modify their course of action by increasing, decreasing, accelerating, delaying, or terminating expenditures.[78] They correct the funding course to enhance value. And staged funding is their mechanism.

Many consequences follow from this analysis. To name but a few, a real options analysis has shown that

> litigants will rationally settle for amounts that can be far higher or lower than the claim's expected value even if that expected value is held constant. *The extent to which the lawsuit's real option settlement value diverges from its expected value depends, in material part, on the variance of the information to be disclosed. . . . [T]he larger the variance, the more dramatic and potentially valuable the information waiting to be disclosed during the course of the lawsuit and the larger the value of the plaintiff's option to continue or to abandon the litigation . . . .*[79]

Negative-value lawsuits can be explained using the real options approach because once they are understood as out-of-the-money call options, it is easy to see that plaintiffs are rational in pursuing them when the cost of the option is less than its value.[80] Similarly, trial can

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management." MYERS & BREALEY, *supra* note 22, at 617. But as discussed elsewhere, the perhaps the greatest value financiers bring to litigation finance (as to VC) is their management ability (noncash contributions). *See* Steinitz, *The Contract*, *supra* note 18, at 508.

76. From an investment perspective, lawsuits are therefore largely indistinguishable from R&D projects, and it follows that the tools applied to the economic analysis of R&D projects might also be profitably applied to the economic analysis of litigation. The literature, however, reveals a rather remarkable gap between the two fields of study. Over the last two decades or so, real options analysis has emerged as the state-of-the-art technique for the economic analysis of R&D and has generated insights that are difficult or impossible to obtain through the application of more traditional DCF or NPV techniques. Real options analysis has, however, had very little influence on the economic analysis of litigation. Grundfest & Huang, *supra* note 56, at 1270–71 (citations omitted).

77. *See generally* Steinitz, *The Contract, supra* note 18. There is no conflict between viewing a plaintiff as an investor and as an entrepreneur since the entrepreneur is an investor. *See* Fluck et al., *supra* note 17, at 2.

78. Grundfest & Huang, *supra* note 56, at 1269. For suggestions on how to do just that, namely increase, decrease, accelerate or terminate expenditures in a third-party-funded litigation, see generally Steinitz & Field, *supra* note 19, with a special thanks to Abigail Field for developing the notions of accelerated and supplemental investments in litigation.

79. Grundfest & Huang, *supra* note 56, at 1276 (emphasis added).

80. *Id.* at 1277.

be understood as something other than an error: in certain circumstances, trials can offer a cheaper cost of resolution than settlement.[81]

There is an important difference, however, between litigation options and other options: whereas a "financial option's value is generally a monotonically increasing function of the variance of the underlying instrument . . . settlement values can be discontinuous, nonmonotonic functions of a lawsuit's underlying variance."[82] In fact, scholars have even argued that the potential settlement value of a lawsuit, like that of a stock, follows the pattern of the so-called random walk, with the movement of probability of trial outcome as a function of disclosure.[83] Here's why:

> Consider a case in which the plaintiff's claim hinges critically on the testimony of a single witness or on the outcome of a key judicial ruling. Immediately after the witness testifies or after the ruling issues, the value of the plaintiff's claim will either be sharply higher or lower than the expected value of the claim just prior to the resolution of the uncertainty. The plaintiff's willingness to pursue the lawsuit will also rationally change in response to the new information.
>
> . . . .
>
> [Moreover,] changes in the parties' relative bargaining power and in their relative litigation costs can have dramatic and disproportionate effects on a lawsuit's equilibrium settlement value.[84]

A closely related idea is that legal probability is not objective, but rather subjective and indeterminate.[85] Thus, whereas a probabilistic assessment of trial outcome is at the heart of the traditional cost-benefit analysis of the litigation-versus-settlement decision, a real options approach reveals that the traditional scholarship

> forgoes a formal definition of probability and simply assumes it to be a numeric interval between zero and one . . . [and that this scholarship] blurs the distinction between

81. Robert J. Rhee, *A Price Theory of Legal Bargaining: An Inquiry into the Selection of Settlement and Litigation Under Uncertainty*, 56 EMORY L.J. 619, 624 (2006).

82. Grundfest & Huang, *supra* note 56, at 1278.

83. Rhee, *supra* note 81, at 664. A "random walk" is a mathematical expression of a trajectory that consists of taking successive random steps. *See* Karl Pearson, *The Problem of the Random Walk*, 72 NATURE 294 (1905) (coining term). According to Rhee, like stock prices, perceived case values "fluctuate" based on new information. Rhee, *supra* note 81, at 664. Had there been a (more) liquid market in legal claims, their price would "trade within a broad range," moving "stochastically upon the disclosure of new information and events." *Id.* In such cases, "expectation that any individual belief is accurate as to the expected return" is unrealistic. *Id.* Despite the lack of liquidity in legal claims there is, in fact, some evidence of this kind of fluctuation. *See* Maya Steinitz, *Incorporating Legal Claims* (forthcoming) (discussing securities tied to litigation proceed rights that have traded on the NASDAQ).

84. Grundfest & Huang, *supra* note 56, at 1279.

85. Rhee, *supra* note 81, at 638–39.

> matters that are subject to reasonable measurement, such as expected transaction cost, and those that are qualitatively judged, such as expected trial results.[86]

Indeed, traditional law-and-economics literature models probability as a quantifiable concept. In contrast, when mathematicians considered the application of probability to legal action, they rejected the notion that statistical probability could apply or that such probability is measureable.[87] For example, the mathematician George Pólya, who examined the ways in which deliberative bodies construe the same facts and evidence, concluded:

> Two jurors who sat through the same proceedings may disagree: one thinks that the evidence introduced is sufficient proof against the defendant and the other thinks that it is not. . . . [P]eople may be moved in opposite directions by fears, hopes, prejudices and sympathies, or by personal differences. . . . Perhaps both jurors are honest and reasonably unprejudiced, both followed the proceedings with attention, and both are intelligent, but in a different way. The first juror may be a better observer of demeanor. He observes the facial expressions of the witnesses, the tics of the defendant; he notices when an answer is haltingly given; he is impressed by quick motions of the eyes and little gestures of the hands. The other juror may be a less skillful observer of facial expressions, but a better judge of social relations: he understands better the milieu and the circumstances of the people involved in the case. Seeing the same things with different eyes, honestly and not unintelligently, the two jurors come to opposite conclusions.[88]

This description provides a natural segue into behavioral economics, the branch of economic analysis that takes into account actual human behavior. Behavioral economics thus nicely complements financial theory since the latter, as described above, focuses on taking into account decisionmaking.[89]

C. Behavioral Economics of Litigation

Behavioral economists of the law seek to explore the implications of actual human psychology and behavior to the law. Behavioral economists base their analyses, in particular, on the documented fact that rationality, willpower, and self-interest are bounded.[90] They articulate as first principle the idea that humans—for

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86. *Id.* at 638.

87. *Id.* at 645–50 (citing JOHN MAYNARD KEYNES, A TREATISE ON PROBABILITY 7 (1921)) (distinguishing statistical probability from logical probability and discussing the mathematical literature).

88. *Id.* at 649 (quoting GEORGE PÓLYA, 2 MATHEMATICS AND PLAUSIBLE REASONING 56 (1968)).

89. Illustrating the connection is Bar-Gill, *supra* note 72.

90. Christine Jolls et al., *A Behavioral Approach to Law and Economics*, 50 STAN. L. REV. 1471, 1476–77 (1998). All three bounds, the authors note, are well documented in the social sciences but relatively unexplored in law and economics. *Id.* This is a direct attack on the central

our purposes specifically, litigants, decisionmakers (jurors, judges and arbitrators), and lawyers (including funders, who are often lawyers by training)[91]—make systemic judgment errors using heuristics and biases (mental shortcuts and cognitive illusions).[92] Despite the dismissiveness of many neoclassical economists of the law,[93] "by and large, [] the idea that our minds are susceptible to systemic errors is now generally accepted."[94]

Irrationality, bounded self-interest, and willpower all have a documented effect on the ability of litigants, lawyers, and other experts to generate viable predictions of litigation outcomes.[95] First, all of the assumptions underlying Priest and Klein's model and the neoclassical economic theory of law, the foremost of which is the assumption of rationality, have been shown not to hold when actual litigants are involved. However, this does not mean that their model is unimportant. One way to think of the relationship between the two schools is that neoclassical law and economics is similar to in vitro scientific experiments, whereas behavioral economics is similar to in vivo experiments.[96] Such an analogy highlights the fact that modeling may yield results that have explanatory value but not necessarily predictive value.[97]

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ideas of neoclassical law and economics—those of utility maximization, stable preferences, rational expectations, and optimal processing of information. *Id.*

91. Steinitz, *supra* note 3, at 1315.

92. *See generally* DANIEL KAHNEMAN, THINKING, FAST AND SLOW (2011) (summarizing and updating Kahneman and Amos Tverskey's works, including Amos Tverskey & Daniel Kahneman, *Judgments Under Uncertainty: Heuristics and Biases*, 185 SCIENCE 1124 (1974), and Daniel Kahneman & Amos Tverskey, *Prospect Theory: An Analysis of Decision Under Risk*, 47 ECONOMETRICA 263 (1979), as well as their progeny and recent developments in cognitive and social psychology). "Systemic errors are known as biases, and they recur predictably in particular circumstances." *Id.* at 3–4. A heuristic is "a simple procedure that helps find adequate, though often imperfect, answers to difficult questions." *Id.* at 98.

93. *See* Jolls et al., *supra* note 90, at 1476–77 (arguing human decisionmaking systemically departs from conventional economic models).

94. KAHNEMAN, *supra* note 92, at 10.

95. Jolls et al., *supra* note 90, at 1476–77.

96. "[An] in vitro process [is a] biological experiment or technique carried out in a laboratory, outside the body of a living organism (literally 'in glass,' for example in a test tube). By contrast, an in vivo process takes place within the body of an organism." HUTCHINSON DICTIONARY OF SCIENCE 109 (2006). Because the test conditions in vitro "may not correspond to the conditions inside of the organism, this may lead to results that do not correspond to the situation that arises in a living organism." *In vitro*, PRINCETON, http://www.princeton.edu/~achaney/tmve/wiki100k/docs/In_vitro.html (last visited Sept. 18, 2013). Modeling and the use of assumptions that are self-consciously counterfactual to gain qualified but valuable insight is thus similar to in vitro experimentation.

97. *Cf.* Elizabeth F. Loftus & Willem A. Wagenaar, *Lawyers' Predictions of Success*, 28 JURIMETRICS J. 437, 441 (1988):

Since behavioral economics focuses on how humans actually make decisions, such as litigants' settlement decisions and jurors' liability and damages decisions, its research can be understood as describing the reasons for the nonmonotonic nature of litigation value observed by finance theorists, the effects of which staged funding can help ameliorate. The following passages illustrate this point by describing the literature that documents heuristics and biases of judges, juries, litigants, and lawyers.

In one ground-breaking piece, Guthrie, Rachlinski, and Wistrich tested the influence of five common cognitive illusions on judges' decisionmaking: First, they tested "anchoring," the tendency to make estimates based on irrelevant starting points.[98] Second, they tested "framing," which is the tendency to treat economically equivalent gains and losses differently based on context.[99] Third, they tested "hindsight bias," or the human tendency to perceive past events

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> [E]conomists attempted to explain lawyers' decisions to litigate versus to settle. Their analysis assumes that a lawyer considers the probable outcomes of further litigation steps and weighs those outcomes against economic benefits that are likely to be obtained without further litigation. *When we think about a lawyer "considering the probable outcomes" we naturally ask whether such consideration is done in an optimistic or pessimistic way*, not only by a single lawyer, but also by the opposing advocate.

(emphasis added) (citations omitted).

98. Chris Guthrie et al., *Inside the Judicial Mind*, 86 CORNELL L. REV. 777, 784 (2001). Litigation often produces anchors—a classic example being settlement offers. During settlement negotiations, litigants have been shown to be influenced by the opening offers of opposing parties. *Id.* at 789 (citing Russell Korobkin & Chris Guthrie, *Opening Offers and Out-of-Court Settlement: A Little Moderation May Not Go a Long Way*, 10 OHIO ST. J. ON DISP. RESOL. 1, 12–13 (1994)). Professors Russell Korobkin and Chris Guthrie found that people evaluating hypothetical settlement offers were more likely to accept a $12,000 final settlement offer when it followed a $2,000 opening offer than when it followed a $10,000 opening offer. Korobkin & Guthrie, *supra*, at 1, 11–13. Korobkin and Guthrie hypothesized that those who received the $2,000 opening offer expected to settle for a relatively small amount, so the $12,000 final offer seemed generous by comparison. *See id.* On the other hand, those who received the $10,000 opening offer expected to settle for relatively more, so the $12,000 final offer seemed relatively stingy. *See id.* The opening offers effectively "anchored subjects' expectations" and influenced their settlement preferences. *See id.* at 18; *see also* KAHNEMAN, *supra* note 92, at 119; Guthrie et al., *supra*, at 794–95.

99. Framing can have a profound impact on civil lawsuits because litigation produces a natural frame. In most lawsuits, plaintiffs choose either to accept a certain settlement from the defendant or to gamble, hoping that further litigation will produce a larger gain. Most defendants, by contrast, choose either to pay a certain settlement to the plaintiff or to gamble that further litigation will reduce the amount that they must pay. Thus, plaintiffs often choose between options that appear to represent gains, while defendants often choose between options that appear to represent losses. As such, plaintiffs are more likely to prefer settlement, the risk-averse option, while defendants are more likely to prefer trial, the risk-seeking option. Guthrie et al., *supra* note 98, at 795 (citations omitted).

to have been more predictable than they actually were.[100] Fourth, they tested the "representativeness heuristic," which involves ignoring statistical information—particularly the frequency with which an underlying category of events occurs—in favor of individuating information.[101] And fifth, they tested the "egocentric bias," which is the human tendency to overestimate one's own abilities.[102] They summarized their findings as thus:

> We found that each of these cognitive illusions influenced the decision-making processes of the judges in our study. Although the judges displayed less vulnerability to two of the five illusions than other experts and laypersons, the results demonstrate that under certain circumstances judges rely on heuristics that can lead to systematically erroneous judgments.[103]

As background, the authors also summarized decades of research on the effects of similar cognitive illusions of juries, noting that "juries believe that litigants should have predicted events that no one could have predicted, allow irrelevant or inadmissible information to influence liability determinations, defer to arbitrary numerical estimates, and rely on incoherent methods to calculate damages."[104]

Legal realism is often caricatured as standing for the proposition that judicial outcomes hinge on "what the judge had for breakfast."[105] However, recent studies show that legal realists may have been wrong and that, in fact, judicial decisions also hinge on judges' lunch and snacks. The eight participants in the study described below are parole judges:

> They spend entire days reviewing applications for parole. The cases are presented [to them] in random order, and the judges spend little time on each one, an average of 6 minutes. (The default decision is denial of parole; only 35% of requests are approved.) The exact time of each decision is recorded, and the times of the judges' three food

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100. *Id.* at 799. Due to this bias, people (e.g., jurors) overstate their own ability to have predicted the past. They then believe that others (e.g., defendants) should have been able to predict events better than was in fact possible. Studies have therefore found that the hindsight bias influences decisions on liability. *Id.* at 800 (discussing juror's hindsight, specifically); *see also* KAHNEMAN, *supra* note 92, at 202 (describing hindsight bias).

101. Guthrie et al., *supra* note 98, at 805 (explaining that the representativeness heuristic can lead people to discount relevant statistical information and misjudge as a result); *see also* KAHNEMAN, *supra* note 92, at 151–52.

102. Guthrie et al., *supra* note 98, at 811–13 (citing Linda Babcock & George Loewenstein, *Explaining Bargaining Impasse: The Role of Self-Serving Biases*, J. ECON. PERSP., Winter 1997, at 109, 119) (observing that egocentric biases are likely to be "an important determinant of bargaining impasse").

103. *Id.* at 784.

104. *Id.* at 780–81; *see also id.* at 780–81 nn.12–16.

105. *See* FREDERICK SCHAUER, THINKING LIKE A LAWYER: A NEW INTRODUCTION TO LEGAL REASONING 127–29 & n.15 (2009) (tracing the origin of the "what the judge had for breakfast" quip).

> breaks—morning break, lunch and afternoon break—are recorded as well. The authors of the study plotted the proportion of approved requests against the time since the last food break. The proportion spikes after each meal, when about 65% of requests are granted. During the two hours or so until the judges' next feeding, the approval rate drops steadily, to about zero just before the meal . . . [T]ired and hungry judges tend to fall back on the easier default position of denying requests for parole. Both fatigue and hunger probably play a role.[106]

Similarly, the empirical evidence of litigants' biases is mounting. The list of reasons why litigants' behavior does not, in fact, comport with the traditional model's predictions is long:

> Litigants litigate not just for money, but to attain vindication; to establish precedent; "to express their feelings"; to obtain a hearing; and to satisfy a sense of entitlement regarding use of the courts, all of which can easily preclude out of court settlement. Moreover, their decisions to settle or litigate may be affected by the context of the choice, the frame in which it is presented, the identity of the person describing the choice, whether the litigants have faced similar choices before, the litigants' self-serving biases concerning the fairness of their position, habit, unyielding conceptions of justice, and myriad other factors.[107]

Particularly relevant is empirical evidence of divergence, rather than convergence, of the parties' assessments of the likely outcome of the litigation as more information is revealed during the course of litigation.[108] This seems to be the case because litigants interpret the information egocentrically.[109] Further distorting a litigant's rational assessment of the likelihood of success is the sunk cost phenomenon,[110] subjective psychological costs and litigation fatigue,[111]

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106. KAHNEMAN, *supra* note 92, at 43–44.

107. Korobkin & Guthrie, *supra* note 58, at 79–81 (providing a string of citations to this body of empirical evidence).

108. Jolls et al., *supra* note 90, at 1489–1508.

109. George Loewenstein & Don A. Moore, *When Ignorance Is Bliss: Information Exchange and Inefficiency in Bargaining*, 33 J. LEGAL STUD. 37, 37 (2004). For a comprehensive overview of the literature on overconfidence, see Samuel Issacharoff & George Loewenstein, *Second Thoughts About Summary Judgment*, 100 YALE L.J. 73, 111–12, nn.149–50 (1990) (citing JUDGMENT UNDER UNCERTAINTY 287–355 (D. Kahneman, P. Slovic & A. Tversky eds., 1982)). Overconfidence may result, in part, from the tendency of parties to assess fairness in a biased manner that favors themselves. For a discussion of fairness biases, see D.M. Messick & K.S. Cook, *Psychological and Sociological Perspectives on Distributive Justice: Convergent, Divergent, and Parallel Lines*, *in* EQUITY THEORY (D. Messick & K. Cook eds., 1983). *See* Max H. Bazerman & Margaret A. Neale, *Improving Negotiation Effectiveness Under Final Offer Arbitration: The Role of Selection and Training*, 67 J. APPLIED PSYCHOL. 543 (1982); Henry S. Farber & Max H. Bazerman, *Divergent Expectations as a Cause of Disagreement in Bargaining: Evidence from a Comparison of Arbitration Schemes*, 104 Q.J. ECON. 99 (1989); *see also* Jolls et al., *supra* note 90, at 1501–04 (discussing Loewenstein & Moore, *supra*).

110. Issacharoff & Loewenstein, *supra* note 109, at 113–14; Samuel Issacharoff & George Loewenstein, *Unintended Consequences of Mandatory Disclosure*, 73 TEX. L. REV. 753, 760–61 (1995).

111. Robert Mnookin & Lewis Kornhauser, *Bargaining in the Shadow of the Law: The Case of Divorce*, 88 YALE L.J. 950, 971–72 (1979).

reactive devaluation, (i.e., the desire to avoid appearing to capitulate to an adversary), and status quo bias.[112] All of these factors render settlement less likely, rather than more likely, in certain cases, despite the disclosure of information.

Empirical research shows that experts' abilities to predict success is also subject to systematic errors. While weather forecasters have been found to be very "well calibrated" (yes, this is not a typo) in their predictions of uncertain future events,[113] it turns out that, for example, physicians and psychologists tend to be "poorly calibrated." It has also been empirically shown that the calibrations of the latter become even poorer as they are given more information about an individual's historical background.[114] Practicing auditors in the field of public accounting were found to be underconfident in their predictions of uncertain future events.[115] Astonishingly, even statisticians have been shown to have poor statistical intuition.[116]

Lawyers, like other experts, also do not transcend human nature. Multiple studies have shown that even experienced lawyers are not good at predicting the outcome of litigation: "The results are consistent: lawyers, insurance adjusters, and judges all err by very substantial amounts when asked to estimate either the settlement value or predicted trial outcomes."[117] In a striking example,

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112. Adam J. Hirsch, *Evolutionary Theories of Common Law Efficiency: Reasons for (Cognitive) Skepticism*, 32 FLA. ST. U. L. REV. 425, 433–34 (2005) (citing Chris Guthrie, *Better Settle than Sorry: The Regret Aversion Theory of Litigation Behavior,* 1999 U. ILL. L. REV. 43, 45–46) ("On the other hand, the phenomenon of regret aversion (that is, the desire to avoid the experience of knowing and regretting that one has made a wrong decision) can help to produce settlement.").

113. Loftus & Wagenaar, *supra* note 97, at 438–40.

114. *Id.* Just as depressing, especially to those who are in the business of educating professionals, studies have found that experts display either roughly the same biases as college students or the same biases at somewhat reduced levels. SCOTT PLOUS, THE PSYCHOLOGY OF JUDGMENT AND DECISION MAKING 258 (1993).

115. Loftus & Wagenaar, *supra* note 97, at 440.

116. Guthrie et al., *supra* note 98, at 783 n.26 (providing a literature survey of empirical studies on cognitive illusions of various professionals, including Craig R. Fox et al., *Options Traders Exhibit Subadditive Decision Weights*, 13 J. RISK & UNCERTAINTY 5, 16 (1996) (finding that option traders rely on heuristics in probabilistic reasoning), and Gregory B. Northcraft & Margaret A. Neale, *Experts, Amateurs, and Real Estate: An Anchoring-and-Adjustment Perspective on Property Pricing Decisions*, 39 ORGANIZATIONAL BEHAV. & HUM. DECISION PROCESSES 84, 95–96 (1987) (reporting that real estate agents fall prey to anchoring effects when estimating real estate prices)); KAHNEMAN, *supra* note 92, at 5 (describing the poor statistical intuition of statistics professors).

117. Stephen C. Yeazell, *Transparency for Civil Settlements: NASDAQ for Lawsuits?* 9 (UCLA Sch. of Law, Law & Econ. Research Paper Series, No. 08-15, 2008), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1161343; *see also* Theodore Eisenberg, *Differing Perceptions of Attorney Fees in Bankruptcy Cases*, 72 WASH. U. L. REV. 979, 979–81

> One study reported: Sixteen members of the Los Angeles Claims Managers Association were asked to evaluate a hypothetical claim. Nine valued the claim at $50,000 to $150,000; the rest were spread from $6,000 to $750,000. The same variation occurred among claims staff within a single company, and the more experienced the claims adjusters, the wider the variation. Settlements of actual cases show similar degrees of unexplained variations.[118]

Psychologists studying the cognitive psychology that assesses the capabilities of experts (as opposed to novices and lay people) found that (1) lawyers are overconfident in their chances of winning (especially in cases in which they had been highly confident to begin with); and (2) lawyers incorrectly predict that other lawyers are well-calibrated or underconfident in their predictions.[119] Psychologists note that lawyers' subjective assessments of probabilities affect case strategy—for example, a lawyer's analysis of the expected return on an expensive versus inexpensive expert.[120] (Therefore, lawyers' mis-assessments of expected return can be a cause of value destruction.) While the authors suggest some ways in which lawyers may be debiased,[121] they depressingly note that studies of other experts' predictive abilities find that overconfidence actually increases with the degree of expertise one believes oneself to have.[122]

(1994) (studying self-serving perceptions of fairness and their effects on the size of fee claims made by bankruptcy attorneys); Donald C. Langevoort, *Where Were the Lawyers?: A Behavioral Inquiry into Lawyers' Responsibility for Clients' Fraud*, 46 VAND. L. REV. 75, 100–01 (1993) (describing how once lawyers commit to client representation, they may be biased in the construal of information and hence miss warning signs of client fraud); Loftus & Wagenaar, *supra* note 97, at 450 (discussing the effect of overconfidence on how lawyers assess the probability of success); Neil Vidmar & Jeffrey J. Rice, *Assessments of Noneconomic Damage Awards in Medical Negligence: A Comparison of Jurors with Legal Professionals*, 78 IOWA L. REV. 883, 896 (1993) ("[T]he data do not support the view that the reasoning of laypersons in calculating the award is substantially different from that of legally trained persons."). *But cf.* Molot, *supra* note 12, at 384 ("[L]awyers are quite well equipped to do what actuaries cannot. Indeed, lawyers routinely price litigation risk—for themselves and their clients.").

118. Yeazell, *supra* note 117, at 9–10 (citations omitted) (internal quotation marks omitted).

119. *See* Loftus & Wagenaar, *supra* note 97, at 448–50. Interestingly, the authors found a similar overconfidence bias among Dutch lawyers suggesting, perhaps, that it transcends legal cultures (at least within the West). *Id.* at 450 n.24.

120. *Id.* at 441–42.

121. *Id.* at 451 ("One technique involves training people by giving them prompt feedback on the accuracy of their judgments. . . . [Another] is to encourage people to generate reasons why their initial judgment might not be correct.").

122. *Id.* (citing J.V. Bradley, *Overconfidence in Ignorant Experts*, 17 BULL. PSYCHONOMIC SOC'Y 82–84 (1981)). The problem of overconfidence, generally, is that:

> [N]either the quantity nor the quality of the evidence counts for much in subjective confidence. The confidence that individuals have in their beliefs depends mostly on the quality of the story then can tell about what they see . . . our associative system tends to settle on a coherent pattern of activation and suppresses doubt and ambiguity.

KAHNEMAN, *supra* note 92, at 87–88.

In trying to explain the data, the authors allude to the "availability heuristic": relying on the ease of memory search for examples of making judgments about the probability of events and assessing the relative importance of issues by the ease with which they are retrieved from memory (which, in turn, is largely determined by media coverage).[123] They write that others[124] suggest that "overconfidence could occur because the lawyer can bring readily to mind a similar case in which a favorable verdict was achieved, or because the lawyer fails to bring to mind similar cases in which unfavorable verdicts were achieved."[125]

The rarity of trials, exhibited by the fact that the vast majority of cases settle, further complicates attempts to value litigation outcomes.[126] Therefore, data are inadequate and lawyers' experience is insufficient to reliably assess the probability of how judges or juries might decide a particular case.[127] Importantly, while there are numerous legal settlements—by one estimate, this market is believed to have an annual value of $50 billion—this market is unusual in that we have no information about it.[128] Accordingly, pricing information for settlements is woefully inadequate in comparison to information about comparable markets; unlike real estate, for example, lawyers do not have settlement comparables from which to draw.[129]

More broadly, financial theory has documented that accurate predictions of future prices by individual market participants are impossible, and

> there is no reason why this truth does not apply with more force to the predictions of legal decisions given that a civil action is not subject to market pricing, is not supported by risk management services or a derivative market, and is one of the most illiquid of assets or liabilities.[130]

D. The Accounting Perspective

The Financial Accounting Standards Board ("FASB") has also weighed in on the question of legal claim valuation. It prohibits

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123. KAHNEMAN, *supra* note 92, at 8.

124. Loftus & Wagenaar, *supra* note 97, at 438 (citing David Dunning et al., *The Overconfidence Effect in Social Prediction*, 58 J. PERS. SOC. PSYCHOL. 568 (1990)).

125. Loftus & Wagenaar, *supra* note 97, at 450.

126. SHAVELL, *supra* note 59, at 410 (stating that around ninety-eight percent of cases settle).

127. Rhee, *supra* note 81, at 642–44.

128. Yeazell, *supra* note 117, at 3, 6.

129. *Id.*

130. Rhee, *supra* note 81, at 627.

evaluating and listing a claim as an asset on a balance sheet.[131] According to the FASB, a contingency is "an existing condition, situation, or set of circumstances involving uncertainty as to possible gain [referred to as a 'gain contingency'] to an enterprise that will ultimately be resolved when one or more future events occur or fail to occur."[132] Gain contingencies cannot be recognized on a company's income statement until all contingencies have been resolved. Disclosure of such gain contingencies can be made when there is a high probability that the contingency will be realized, but "care should be exercised to avoid misleading implications as to the likelihood of realization."[133]

The mere fact that an estimate is required is not a sufficient reason to regard an uncertainty as a gain contingency.[134] Pending court cases, however, are a typical example of a gain contingency.[135] Given that they are a typical example, the FASB provides factors that must be considered when evaluating the probability of an unfavorable litigation outcome. The factors are the nature of the litigation, the progress of the case, the opinion (formal letter) of legal counsel, the experience of the company and others with similar cases (comparables), and management's anticipated response to the suit.[136] Having provided these factors, the FSAB cautions that "the outcome of

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131. Selvyn Seidel & Sandra Sherman, *Corporate Governance Issues Regarding "Stock Price Manipulation" and "Insider Trading" (and Other Matters) Are Coming to Third Party Financing*, MODEL LITIG. FIN. CONT. (Mar. 25, 2013), http://litigationfinancecontract.com/corporate-governance-issues-regarding-stock-price-manipulation-and-insider-trading-and-other-matters-are-coming-to-third-party-financing/ (discussing disclosure issues surrounding third-party funding of a public company's claim). For more on the accounting treatment of legal claims and the obstacles it poses to plaintiffs, see Steinitz, *supra* note 82.

132. ACCOUNTING FOR CONTINGENCIES, Statement of Fin. Accounting Standards No. 5, at 3 (Fin. Accounting Standards Bd. 1975) (citation omitted), *available at* http://www.fasb.org/cs/BlobServer?blobkey=id&blobnocache=true&blobwhere=1175823287525&blobheader=application%2Fpdf&blobcol=urldata&blobtable=MungoBlobs.

133. ACCOUNTING FOR CONTINGENCIES, *available at* http://tinyurl.com/keo783c (going on to note that "as a result, it is unusual to find information about contingent gains in [a] financial statement").

134. *Id.* at 1.

135. This is probably the reason why banks do not consider legal cases to be assets and do not lend based on the value of contingency fees. *See* Jonathan D. Epstein, *An Unusual Financial Niche: Lending Money to Lawyers*, BUFFALO NEWS, Sept. 30, 2007, at C1; *see also* Ben Winograd, *Specialized Lenders Help Fill Financing Void for Law Firms*, AM. BANKER, Nov. 2, 2006, at 3 ("No matter how large the potential verdict, banks generally will not make loans beyond the existing assets of a firm or its attorneys."). Both articles are discussed in Engstrom, *supra* note 32 (manuscript at 13 n.54).

136. ACCOUNTING FOR CONTINGENCIES, *supra* note 132, at 10.

pending litigation, however, can seldom be predicted with any assurance."[137]

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What, then, are a buyer (funder) and a seller (plaintiff) of stakes in legal claims to do? The next Section ties together the previous threads and suggests that staged funding is a mechanism that can allow parties to adjust expenditures and price as information, risk, and other variables change throughout the life of litigation. Thus, while pricing a lawsuit may be impossible ex ante, the effects of such uncertainty can nonetheless be effectively and considerably minimized. And while lawsuits are different from start-up companies in important ways (discussed below), staged funding can be adjusted to accommodate their unique features.

IV. STAGING FUNDING OF LEGAL CLAIMS

As noted at the outset, the broader framework within which this Article is set views commercial legal claims as similar in important respects to portfolio companies and views litigation funding as similar to VC. In this analogy, the litigation financiers are similar to venture capitalists, plaintiffs are similar to entrepreneurs, attorneys are similar to managers, and the litigation is similar to the portfolio company (a start-up).[138] The core financial challenges in both

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137. ACCOUNTING FOR CONTINGENCIES, *supra* note 132, at 5. This attitude is understood to be a derivative of the general conservatism underlying accounting standards: "[t]his also derives from the accounting postulates of conservatism and realization . . . conservatism [i]s: A prudent reaction to uncertainty to try to ensure that uncertainty and risks inherent in business situations are adequately considered . . . . However . . . Conservatism . . . should no[t] connote deliberate, consistent understatement of net assets and profits." PRICEWATERHOUSECOOPERS, FORENSIC ACCOUNTING TECHNICAL NOTES: SFAS 5, "ACCOUNTING FOR CONTINGENCIES" 3, *available at* http://www.docstoc.com/docs/37635538/SFAS-5_-Accounting-for-Contingen (alteration in original) (internal quotation marks omitted). The idea of not recognizing contingent gains goes way back in the history of accounting. In the eighteenth century, accounting treatises advised bookkeepers to create so-called fictional accounts, which disclosed potential gains (e.g., from a shipment still at sea), but which segregated the amount of any such gains from the business's regular accounts kept on an accrual basis. For a discussion of this history, see SANDRA SHERMAN, FINANCE AND FICTIONALITY IN THE EARLY EIGHTEENTH CENTURY: ACCOUNTING FOR DEFOE 129–55 (1996). I thank Sandra Sherman for helping me parse out the accounting literature.

138. *See* Steinitz, *The Contract*, *supra* note 18, at 490 (drawing, for an analysis of the economics of VC and the associated contracting practices, on GOMPERS & LERNER, *supra* note 29, at 127; Ronald J. Gilson, *Engineering a Venture Capital Market: Lessons from the American Experience*, 55 STAN. L. REV. 1067, 1069 (2003); and Gompers & Lerner, *supra* note 29, at 465); *see also* Fluck et al., *supra* note 17; Zsuzsanna Fluck et al., Venture Capital Contracting: Staged

types of finance are that they are characterized by extreme uncertainty, extreme information asymmetry, extreme agency problems, and the problem of effort provision.

All these translate into a pricing challenge: how should a litigation funder price a venture that is thus characterized? This problem is compounded by data suggesting that a litigation funder is unlikely to be good at predicting claim value (no matter how experienced its principals and staff lawyers are) and that good faith estimates from the litigators are likely similarly flawed. The plaintiff faces a similar problem: how to price the claim and, particularly, how to avoid overselling interests in the litigation at a point in time where it might be particularly desperate for funding (especially if a statute of limitations clock is ticking).

Multiple solutions have been devised in VC to deal with an equivalent challenge. The hallmark feature is staged funding, which minimizes all four problems discussed above and allows the portfolio companies to modify their course of action by increasing, decreasing, accelerating, delaying, or terminating expenditures in reaction to additional information.

Staged financing, as described in Part III, addresses information asymmetry and extreme uncertainty by allowing the funder to reassess its involvement based on an updated valuation as more information is revealed. The funder may also simply decline to participate further. By being an iterative process, staged funding allows funders to increase or decrease expenditures as necessary. Staged financing also addresses agency costs: the risk of losing future funding incentivizes entrepreneurs and plaintiffs to cooperate and expand efforts.

It is important, however, to recognize that litigation differs from start-up companies in a few critical ways that justify modifying the specifics of staged funding when the investment in question is litigation. The key difference I focus on here is the one relating to valuation—namely, on the fact that a lawsuit's settlement values over time are discontinuous, nonmonotonic functions of a lawsuit's underlying variance, whereas the value of a start-up is, generally speaking, monotonic.

Financing and Syndication of Later-stage Investments (May 23, 2008) (unpublished manuscript) (presented at the Conference on the Corporate Finance and Governance of Privately Held Firms), *available at* http://www.bi.edu/oslofiles/ccgr/fluck_garrison_myers.pdf. The similarities have some broad implication for both policy (regulation and judicial supervision) and private ordering (contracts).

Other differences include the fact that the ability of funders to obtain control is curtailed by the law of champerty.[139] Though, importantly, litigation funders will bargain for termination rights, which de facto mean they can 'shut down' a litigation. Another key difference is the heightened vulnerability of litigants if funding runs out prematurely. This heightened vulnerability arises because litigants face opponents, not competitors, and because their timelines are externally dictated by the applicable rules of procedure and by a judge.[140]

In some more detail, a claim's potential value differs from a start-up's value because plaintiffs "sell" to "markets" that are completely different than the ones in which tech start-ups operate. In litigation, the "market" is comprised of judges, jurors, arbitrators, and the defendant. The parties have very little ability to affect who their target market is (predominantly via forum shopping, attempts to disqualify judges or arbitrators, and by challenging jurors). In contrast, entrepreneurs can choose, shift, and seek to expand their target markets in a way unimaginable to a plaintiff. Moreover, after "selling" the claim to the judge or jury, the claim value is fixed. In contrast, a company can expand its customer base, and therefore its value, in a potentially unlimited fashion. To appreciate both of these features of start-ups, consider Amazon's evolution from a bookseller to a general marketplace.

Entrepreneurs can affect potential value by adapting their products in response to test marketing. Litigants' options are much more limited. While litigants can frame the "nucleus of operative facts"[141] as different causes of action and try to affect a change in the applicable doctrine by advancing novel legal arguments, the facts and the governing law are what they are. Consequently, while the value of

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139. *See* Steinitz & Field, *supra* note 19, at 18. On Champerty and its effects on trading in legal claims generally, see Sebok, *supra* note 12, at 61.

140. *See* Steinitz & Field, *supra* note 19, at 39. The adaptation of staged funding to litigation funding in this section draws heavily on Maya Steinitz & Abigail C. Field, *Staging Litigation Funding*, MODEL LITIG. FIN. CONT., http://litigationfinancecontract.com/staging-litigation-funding/ (last visited Sept. 18, 2013), and I thank Abigail C. Field for her contributions in developing this point. *See also* Robert J. Rhee, *Litigation Financing and Time Dilution*, MODEL LITIG. FIN. CONT. (Jan. 23, 2013), http://litigationfinancecontract.com/2013/01/:

> [A]n opponent can undermine the financial investment through manipulation of the action to affect investment returns. The concern is more acute for repeat players that may have an incentive to undermine the method of financing . . . . One can envision a set of circumstances in which an opponent makes a strategic settlement offer calculated to create a divergence of interest between the financial investor and the invested party.

141. *See, e.g.*, United Mine Workers of Am. v. Gibbs, 383 U.S. 715, 725 (1966).

a commercial claim can rise or fall, and while the investors (plaintiffs, litigators, and funders) can affect such fluctuation to some degree, changes by an order of magnitude are very unlikely, and the generally upward trajectory of a start-up that is proceeding on track has no parallel in litigation.

Below are examples of some points that contracting parties entering a litigation-funding agreement should therefore consider when modifying staged funding, as it evolved in VC, to reflect the differences in valuation trajectories throughout the life of a litigation.[142]

A. Selecting Litigation Milestones

Technology start-ups, while each unique, share a common path of development. Key milestones are quite standard and include the creation of a business plan, the development of the technology, launch and early customer traction, scaling and adoption, and mass expansion.[143] While litigation, in theory, has a similarly predictable structure—precomplaint, complaint, discovery, trial, appeal—variations (and their effect on claim value) are dramatic. Some cases will involve motions for summary judgment or motions to dismiss as key steps. Others will not. In some cases, documentary discovery will yield the most information; in others, one, some, or all of the depositions will reveal significant information. In some cases, an interlocutory appeal may be dispositive; in others, such appeals will play no role.[144] For example, there are reasons to believe that in international arbitrations, a funding favorite, postarbitration enforcement actions may be where most of the uncertainty lies.

Critically, an adversary may unilaterally and unpredictably impose a crucial milestone—for example, by filing a potentially

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142. Concrete contractual provisions that do so are available in Steinitz & Field, *supra* note 19.

143. For a graphic depiction of these stages, their association with a monotonic increase in valuation, and a potentially uncapped earning potential, see Nathan Beckord, *Start-up Valuation: How Much is Your Company Worth?*, SEED STAGE CAP. (Jan. 19, 2010, 4:19 PM), http://www.seedstagecapital.com/2010/01/start-up-valuation-how-much-is-your.html.

144. For an example of a real life financing that entailed staged financing pegged to litigation milestones, see the financing of Crystallex International Corporation's arbitration against Venezuelad. *See* CRYSTALLEX INT'L CORP., MANAGEMENT'S DISCUSSION AND ANALYSIS FOR THE YEAR ENDED DECEMBER 31, 2012, at 5 (2013), *available at* http://www.crystallex.com/files/KRY%202012%20Year%20end%20MDnA_v001_u9xz34.pdf (last visited September 29, 2013). This financing is discussed in detail in Maya Steinitz, *Incorporating Legal Claims* (forthcoming).

dispositive motion or by deciding to engage in "scorched earth" litigation to turn a particular case into a warning for further plaintiffs and funders.[145] Litigation, in sum, is full of *procedural* surprises. In contrast with substantive surprises, which may be analogous to twists and turns in the developments of a start-up's technology, procedural variables do not have a counterpart in VC, and they greatly contribute to the nonmonotonic trajectory of claim value. Therefore, parties should give close consideration to the selection of milestones. Blindly relying on milestones selected in previous engagements may not be appropriate.

B. Exit, Valuation, and the Transaction Costs of Staged Funding

Given the nonmonotonic and potentially discontinuous variation in lawsuit valuation, multiple investment rounds with multiple corresponding contracts may not be appropriate. The transaction costs of negotiating such rounds can be high and are only justified if they hold the promise of setting a more accurate value and distributing it equitably among the parties. In litigation, it is perhaps more prudent to have certain milestones that allow for exit only, namely triggering events that allow for termination for cause, with or without additional milestones that allow for valuation. For example, a potentially dispositive motion by the plaintiff (such as a motion to dismiss or a motion for summary judgment), the conclusion of discovery, or a settlement offer may be a milestone that warrants a new valuation despite the cost of such valuation.

C. Syndication

A related difference between litigation and start-ups relates to the holdup problem and to syndication. Syndication of later rounds is an imperfect solution to holdup in the litigation-finance context because in the VC context, syndication exerts upward pressure on share price during negotiations. For the reasons discussed above, however, repricing is warranted less often in litigation, and value increase is generally less dramatic (for example, is capped by provable damage the plaintiff suffered with no availability of production

145. This is, for example, Chevron's tactic in the Chevron-Ecuador litigation where Chevron, which is spending an estimate $140 million (USD) in legal fees a year on this twenty-year-old litigation, recently brought RICO claims against the contingency lawyers and later joined as defendants the third-party funder. *See* Chevron Corp. v. Donziger, 768 F. Supp. 2d 581 (S.D.N.Y. 2011).

diversification and market expansion). The best way to get the plaintiff-benefiting pricing impact of syndication is to have competitive bidding at the outset of the claim (as well as at any later repricing round, if any).

D. Increasing, Decreasing, Accelerating, or Delaying Expenditures

Given the extra layer of procedural uncertainties in addition to the substantive uncertainties discussed above, it is arguably even more important for parties to a litigation-finance relationship to be able to adjust expenditure outlays. In the litigation-finance context, attempts to do so in a contract negotiated at the outset or on an ongoing basis untied to litigation milestones can be perceived as a mechanism for impermissibly influencing attorneys' independent judgment.[146] Through staged funding, parties can clearly peg such measures to case developments, dispelling such concerns.

V. CONCLUSION

Understanding litigation as an investment by the plaintiff and the financiers (attorneys or third-party funders), understanding lawsuits as assets, and distinguishing those from the option to settle opens up important possibilities for plaintiffs and financiers to develop incomplete contracts with finely tuned staging mechanisms. These, in turn, will allow all parties involved to minimize the effects of uncertainty and better price their bargain, thereby optimizing the distribution of the litigation's proceeds between its different investors—far beyond practices common today—despite the inherent difficulty (indeed, impossibility) of pricing lawsuits ex ante.

Such funding contracts, which are more efficient for the funders and more equitable for plaintiffs, will also allow the expansion of litigation finance to additional claims that may currently be perceived as too risky. The result: increased access to justice. Since the commodification of legal disputes, the liquidity in legal claims, and the liquidity in law firm ownership are exponentially growing due to radical shifts in the markets—predominantly in the form of third-party funding of claimants and investments in law firms—the time has come for greater sophistication in dealing with the complexities of pricing legal claims.

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146. *See* MODEL RULES OF PROF'L CONDUCT R. 2.1 (2012) (requiring that a lawyer use independent professional judgment in representing a client).