Examining the Minimum Cost of Capital for Litigation Funding; i.e., constructing the Required Rate of Return to attract Capital

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Abstract

Litigation funding is an alternative investment class that suffers from information asymmetry and the lack of fundamental quantitative analysis models that other assets enjoy. These factors make it difficult for funders to attract liquid capital from investors. The non-recourse nature of litigation financing intrinsically makes the cost of capital high, and the lack of a fundamental model to examine the risks and rewards does not assist in the aim of either lowering the capital costs, or attracting investors. This article considers several elements and risks that are factors in underwriting non-recourse litigation loans. Further, it attempts to promulgate a non-recourse loan model to specifically indicate and acquire a minimum cost of capital and thus, the required rate of return to attract investment capital.

Keywords: litigation funding, required rate, cost of capital, risky venture

I.   Introduction

Nonrecourse loans, typically used to finance commercial projects that require large amounts of capital, are now used in the relatively new alternative financing class, namely litigation funding. The loans that fund lawsuits are truly nonrecourse in nature in that if the case is lost, the lender loses the entire amount, while the borrower does not owe anything. Indeed, the aforementioned fact inherently makes litigation funding a risky venture. However, an attractive feature to any addition in an investment portfolio "is that the return doesn't depend on macroeconomic conditions or how hot the market for initial public offerings happens to be" (Fisher 2016). Invariably, litigation funding fits the description.

Although litigation funding is a new, albeit burgeoning, security class, there has yet to be any standardization in the return rates of the various lawsuit loans. Consequently, this investment class still operates contract to contract, with only a few firms operating solely as a litigation funder trading on any exchange. A few factors keeping this class from the main stream is the unpredictable nature of the payouts, the extreme risk factors involved, and that there is no viable, market-tested model to analyze the return.

If a model can be formed that somewhat accurately analyzes the risk factors in a way that definitely expresses a rate of return for litigation cases, then a minimum cost for capital can be offered in order to quantify a required rate of return for capital investments in these loans. This paper considers several elements and risks that are factors in underwriting non-recourse litigation loans. Further, it attempts to promulgate a non-recourse loan model to specifically indicate and acquire a minimum cost of capital and thus, the required rate of return to attract investment capital.

II.   Literature Review

Differing Sectors

While there has yet to be a definitive theory or model set in place to value litigation, there are several write-ups that broach the subject. In Samra's (2016) law review article, the three major sectors of litigation financing—attorney side, plaintiff side, and defense side—are explained; however, the article mostly deals with defense side financing, which corporations and business use as a hedge or risk management tool. Molot (2009) also delves into defense

side financing as risk management and insurance while outlining the difficulties in pricing litigation risk. In *Justice Dealers,* Goral (2015) goes a bit further by giving a framework of the stakeholders—Fundees, Funders, Investors, Attorneys, and Entourage—as well as considering the sectors of litigation funding.

Difficulties, issues and risk factors
In Barksdale's (2007) expose into the costs and benefits of litigation finance, major regulatory issues are detailed for financers: champerty, maintenance, and usury laws in the differing states and provinces. These laws, written to protect the plaintiffs and the sanctity of the justice system, are interpreted differently in most states. The aforementioned laws are huge regulatory and legal risks to any potential investor or legal funder.

III.   List of Companies
Several sources give extensive lists of companies that fund litigation as a primary operation. This includes Goral's (2015) journal article, which lists some of the main third party litigation funding companies in the US, as well as displays which sector each company targets. Garber (2010) also offers a comprehensive list.

Contracts
Steintz and Field's (2014) article explains, outline, and highlight a theorized sample contract for litigation funding. In the business periodicals across the land, one can find articles speculating on the perceived contractual considerations involving litigation financing.

Formula Models
Many articles give a formula or method to calculate potential profits of litigation funding. Yet, there has not been a definite formula to calculate the cost of capital or required return of third party litigation funding that considers all of the risk factors. Garber (2010) offers a simple formula for estimating a return in profits while De Morpurgo (2011) issues a probability model to estimate expected revenue. Bogden's (2014) article offers the most comprehensive model to date by expounding on Katz economic thesis (1999) on guaranty contracts.

IV.   Funding Model
Alternative investments usually "perform with low correlation to stocks and bonds", are "difficult to value, and are generally more illiquid than traditional investments" (Lee 2015). Third party litigation funding, especially the plaintiff side sector, epitomizes the aforementioned statements directly. The need for a model to more easily value lawsuits— and thus provide a more easily traversable path to discovering the cost of capital associated with funding litigation—would indeed provide more liquidity to the growing alternative asset class, as an educated estimated of the return would empower more investors to trade in the marketplace. The daunting objective is to introduce a model for the investor. A simplified portfolio of two identically situated lawsuits—purely theoretical as, in the case of snowflakes, no two lawsuits are the same—with matching potential rewards are posited for consideration.

Percentage of Award Model
Plaintiff's Portion of Judgment
The first objective of funders is to estimate the award that a lawsuit would yield; a feat accomplished with the advice from attorneys familiar with the particular field of litigation. Attorneys with experience with the case type, insurance payouts, transactional court costs, and the time required to take the lawsuit to either a verdict or acceptable settlement, and other

particulars associated with the jurisprudential process are an invaluable commodity for funders. In the example provided in table 1 (see below) we have lawsuits A and B; both with identical judgment—or settlement—amounts, which, for arguments sake, were ascertained to provide around number of $100,000 USD to represent the plaintiff's portion of the judgment, if successful, after taking an assumed thirty percent (30%) for attorney fees, court costs, and all other expenses.

Table 1. Plaintiff portion of judgment (settlement) for two identical hypothetical lawsuits.

Table 1

		Lawsuit A	Lawsuit B
Total Expected Judgment		$142,857.14	$142,857.14
% Due to Plaintiff	70%		
Expected Plaintiff Portion		$100,000.00	$100,000.00

Note: The two lawsuits will become unequal as the presentation progresses.

Loan to Value

Once surmised, the plaintiff's portion is used to calculate the initial investment amount utilizing the Loan to Value (LTV) criteria. Each funder will use its own underwriting criteria for loan to value.   In many cases, loan to value "average less than ten percent of conservatively estimated values of the underlying legal claims" (Garber, 2010). Although, there are examples of large loan to value amounting to thirty-two percent—calculated in hindsight, as we are unsure of the original value of the expected reward—given to a Texas based security company (Richey, 2013). A top advisor has gone on record to say that in commercial litigation funding, the claim value must exceed the financing funds by at least 5:1 ratio (Agee, 2014,).   For the purposes of the example, the ten percent (10%) loan to value will be used (see table 2 below). Given that the expected award for the plaintiff, after expenses, is $100,000 USD, the funders initial cost, or the amount of the non-recourse loan, is $10,000 USD. This is true for both theoretical funding examples.

Table 2. Loan to Value (LTV) applied to plaintiff portion of settlement

Table 2

		Lawsuit A	Lawsuit B
Expected Plaintiff Portion		$100,000.00	$100,000.00
Loan to Value	10%		
Funder's Initial Cost		$ 10,000.00	$ 10,000.00

Total Upfront Costs

Usually, the average length of time for a case to resolve is two years or less; although, the U.S. legal system is notoriously measured, and cases have been known to linger for up to six years without a resolution (Shawdron, 2016). For the purposes of the examples in this article, a moderate estimate of four years is used. Time is an important concept, and risk factor, when considering funding of any sort. In this case, an estimate of $1000—1 percent of the plaintiff's portion of the award—per annum is the estimate for monitoring costs. This is a simple estimation of $4000 over the four years. However, when accounting for the time value of money, coupled with the sum of the risk free rate (1.67% and the interest rate risk (4.10%)—to be explained further along in the article—the present value of the monitoring

costs are approximately $3684. The resulting total costs for the funder is nearly $14000 (see table below).

Table 3. Total cost calculations

Table 3

		Lawsuit A	Lawsuit B
Expected Plaintiff Portion		$100,000.00	$100,000.00
Loan to Value	10%		
Funder's Initial Cost		$ 10,000.00	$ 10,000.00
Monitoring Costs/year		$ 1,000.00	$ 1,000.00
Estimated Time	4 yrs		
PV of yearly PMTs at 5.77%		$ 3,684.00	$ 3,684.00
Total Upfront Costs		$ 13,684.43	$ 13,684.43

Expected Profit

Garber (2010, p. 27) posits that "the expected profit on a deal equals the product of the probability of any return and the expected size of the return if there is any return, minus the supplier's marginal costs of the deal." In table 4 below, we notice that the probability is 50% for this example. As stated before, attorneys are instrumental when estimating the overall expected settlement, and the advice that can be proffered in regards to the probability of successful completion of a suit is no less vital.

Table 4. Total cost calculations

Table 4

		Lawsuit A	Lawsuit B
Expected Plaintiff Portion		$100,000.00	$100,000.00
Probability	50%		
Expected		$ 50,000.00	$ 50,000.00
Total Upfront Costs		- $ 13,684.00	$ 13,684.43
Expected Payout (Profit)		$ 36,316.00	$ 36,316.00

As the table suggests, with the probability of success at 50%, implying a default rate of the same, an investor can only expect there to be $50,000 from which to gain a return. After subtracting the initial costs, the expected profit is $36,316. With the mean expected return for the portfolio at $33,300 (see table 5 below), a prudent strategy would prove to take at least the mean plus the costs from the first $50,000 which would yield $47,000; a multiple of 3.4 times the original investment for a singled case.

Table 5. Scenario probabilities for the sample lawsuits as a portfolio. Best Case is to win both cases; Average Case is to win one and lose one, which has two possibilities noted in the .50 outcome probability; and the Worst Case is to lose both cases.

Table 5

	Lawsuit A	Lawsuit B	Win %	Portfolio Return	Probability	Outcome
Best Case	100,000.00	100,000.00	100%	200,000.00	0.25	50000
Avg. Case	100,000.00	100,000.00	50%	100,000.00	0.50	50000
Worst Case	100,000.00	100,000.00	0%	0.00	0.25	0

Portfolio Expected Return	$100,000.00
Mean	$33,333.33

This would leave the plaintiff with $3000 of the first $50,000 and the initial risk free, non-recourse loan of $10,000; netting $13,000 for the plaintiff in this case. More importantly, this would yield a return for the portfolio as a whole, in the event that one case does not yield to expectations. In cases such as this, the funder would likely have a settlement minimum written into the contract that only allows the plaintiff to settle for an amount so that the funder can recoup costs (Richey, 2013, p.501). Additionally, the funder would likely have a "flat percentage of any remaining recovery" (Richey, 2013, p.497).

Suggested Formula

Rate of Return Model
By utilizing Matthew Bogdan's (2014) take on the model Avery Katz (1999) presented for guaranty contracts, the objective is to demonstrate a simplified analysis of some of the prevailing risk factors in order to construct a rate of return.

Default Risk
The biggest risk with non-recourse financing in general, and litigation funding specifically, is the default risk. The probability of the litigation being unsuccessful is an apparent component of this risk. For simplicity, a 50% default risk is used in the examples, as the risk free rates are at record lows currently. It should be noted that as the probability of success rises, the default risk decreases.

Implicit Interest Rate
Calculating the implicit interest rate involves calculating the estimated duration for our lawsuits. Therefore, the estimated time it takes to reach a settlement is important to calculating the rate of return. The implicit interest rate is different for each funder and depends on factors such as access to capital, the specific interest rate risk, and the risk free rate. For our example, we will use an interest rate risks and risk free instruments to calculate the implicit interest rate.

Table 6. Annual Implicit Interest Rate for example 4-year lawsuits
Table 6

Year	1	2		3	4
Risk Free	1.11%	1.29%		1.49%	1.67%
Rate Risk	1.03%	2.05%		3.08%	4.10%
Implicit Rate	2.13	3.34		4.57	5.77

Monitoring Costs
Monitoring costs for the example are 1% per annum, calculated as $1000 per year against the $100,000 plaintiff portion of the settlement.

Total Cost of Capital or Required Rate
Table 7. Required Rates per duration estimates calculation for 4-year lawsuit
Table 7

Year	1	2	3	4
Implicit Rate	2.13%	3.34%	4.57%	5.77%
Monitoring	1%	2%	3%	4%
Liquidity	3%	3%	3%	3%
Default	50%	50%	50%	50%
Required Rate	56.13%	58.34%	60.57%	62.77%

The high cost of capital reflects the high default risk. Under this model, after four years the rate of return would actually decrease, as there is a finite estimated award for the plaintiff at $100,000. In addition, the four-year estimation for maturity is highly rewarded because of the high default risk, with the funder taking 96% of the settlement in year four in the case the settlement is won (see table below).

Table 8. Return on successful litigation using required rate model
Table 8

Year	1	2	3	4
Required Rate	56.13%	58.34%	60.57%	62.77%
Revenue	$21,366.27	$34,309.54	$56,649.34	$96,061.96

If one thinks that these rates are too high there are a myriad of examples funders reaping yields in this range; one being the aforementioned Texas security company whose funder made 126% return on investment (Richey, 2013).

V.   Conclusion

The contract-to-contract, asymmetric nature of the litigation funding market is slowly losing ground to investing mavericks. The information divide that separates investors and litigation funders, while shrinking, is still wide, which keeps the cost of capital high for this market. Recently, there has been an outcry for quantitative analysis models that utilize the tested finance concepts to bridge this gap. Many believe that with the right methodology in place that clearly and concisely explains the risk factors, and the return for accepting such risks,

that this alternative investment class will grow exponentially and spawn derivatives markets that can readily infuse liquidity and stability.

We have presented two simplistic models. Usually, litigation funders use a hybrid of the two in order to maximize the return, set a settlement floor to defray risk, or create a flexible contract that will work for all parties. Indeed, explaining the risk and potential return associated with litigation funding, in a clear, measured, lucid manner, can be catalyst for attracting capital and facilitate a new, respected asset class with all of the financial products and derivatives that come with such understanding.

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