

Labor Litigation and Liquidity Constrains: New Evidence from Matched Labor and Court Data

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Abstract

The paper tackles the role of liquidity constrains in litigation. How does liquidity constrains affect the likelihood that a plaintiff will settle a case? How does it affect settlement amounts? Instead, how does settlement probabilities and amount vary when defendants are liquidity constrain? Theoretically, we show that settlement amounts decrease when any of the parties becomes more liquidity constrained. Empirically, we exploit an absolute novel dataset to empirically test the theoretical predictions. The new data matches the universe of job spells in Brazil to the universe of labor cases for the period 2009-2014. Then, we use an RD design to empirically test our model predictions by exploiting variations in liquidity caused by a discontinuity in Unemployment Insurance entitlement.

JEL Classification: K40, K41

Key words: Litigation, Legal Procedure, Liquidity Constrains, Settlement

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1 Extended Abstract

It is a well-known fact that capital markets are far from perfect. Notably, they seriously suffer from the problems of adverse selection and moral hazard. At the same time, [Jappelli \(1990\)](#) finds that 20% of families in the US would like to borrow more than they can, while [Chetty \(2008\)](#) documents that almost half of the workers in the US report having zero liquid wealth at the time of a job loss. As a result, it is no surprise that there is plenty of evidence on consumer behavior which is consistent with the idea that a large share of families is significantly liquidity constrained.¹ In the context of litigation, it means that many individuals simply cannot anticipate consumption in response to the the expected income windfall which they may receive in the future by the end of a law suit. The simple reason is that many of them cannot rely on savings for that, while borrowing is often not available or too expensive.

Despite this fact, the rather extensive literature on litigation has not devoted much attention to the issue of how litigation is affected when parts are liquidity constrained. This project approaches this question from a theoretical and empirical prospective. We argue that liquidity constrains are likely to affect litigation outcomes in a quantitatively significant way. A further goal is to analyze different policy measures which can partially off-set these effects in distinct ways and discuss their social desirability.

Why should litigation be affected when plaintiffs and/or defendants are liquidity constrained? The answer to this question comes from putting together two facts. The first is that justice takes time. No matter how good is the judicial system in a country, plaintiffs most often have to wait at least a year for trial. The second fact is that liquidity constrained individuals discount a future cash flow at higher rates. Therefore, a plaintiff who is confident to win a certain amount of money when a case goes to trial in the future, would be better off settling and receiving a lower amount of money today rather than waiting for trial. This would still happen even if the value she receives at trial is corrected by the current interest rate. For example, suppose that a plaintiff is to win a total amount of \$1.000 in a year with probability one and that this value will be updated by the current interest rate of 5% a year, making up to a total of \$1.050. Also assume that she faces no litigation costs for simplicity.² If this person is not liquidity constrained, she would not be

¹See [Jappelli \(1990\)](#); [Card et al. \(2007\)](#); [Agarwal et al. \(2007\)](#); [Basten et al. \(2014\)](#) for example.

²The introduction of litigation costs or uncertain in trial outcomes does not affect this conclusion. In fact, the model developed in this paper allows for litigation costs.

willing to settle for any value lower than the total value of trial (\$1.050) discounted at the current interest rate: \$1.000. Instead, if she faces liquidity constraints, she would be willing to accept a settlement value which is lower than the present value of the trial: \$1.000. In fact, the more the plaintiff is liquidity constrained, the larger is the discount rate which she uses to discount the future income arising from the suit and the lower is minimum the value that she would be willing to settle for. Notice that this reasoning holds even in the total absence of litigation costs. A similar logic is at place when defendants are liquidity constrained. The more liquidity constrained a defendant is, the higher the rate he uses to discount the value that he would have to pay at trial. Thus, liquidity constraints decrease the maximum amount for which a defendant is willing to settle.

Therefore, if liquidity constraints are sizable, important litigation outcomes are to be affected. More specifically, this paper employs a simple stylized model of litigation to approach the following questions. First, how does liquidity constraints affect the likelihood that a plaintiff brings a suit? Second, if the case is brought, how does it affect the likelihood that the case ends in a settlement? Third, if settlement does take place, how does it affect settlement values? After analyzing these questions, we review the literature on liquidity constraints and the data on borrowing costs to get a sense on whether these effects may be quantitatively relevant. For example, based on empirical evidence we argue that unemployed workers and low wealth households are likely to face sizable liquidity constraints. Similarly, small firms are likely to be liquidity constrained to a great extent compared to large firms. We then discuss how these results may impact the effectiveness of substantive law and deterrence.

Finally, we exploit an absolute novel dataset to empirically test the theoretical predictions. We match data on the universe of job spells in Brazil to the universe of labor cases for the period 2009-2014. Then, the Unemployment Insurance schedule is exploited as a source of variation in the worker's liquidity constraints after a dismissal. With an Regression Discontinuity Design, we then study how liquidity constraints affect the outcomes of labor cases.

While there is a fairly extensive stream of literature analyzing the consequences of different litigation features, there is no study assessing how liquidity constraints affect the likelihood of settlement and settlements amounts to the best of my knowledge.³ Hence, the first contribution of this paper is analyzing the implications of liquidity constraints to

³For example, see (Shavell, 1982b,a; Kaplon, 1986; Polinsky and Rubinfeld, 1988; Shavell, 1997; Hylton, 2002) for the literature on litigation features

important litigation outcomes. The second contribution is putting together the empirical evidence on liquidity constrains to argue that these implications are likely to be quantitatively relevant for litigation outcomes, especially in some contexts. The third contribution is analyzing how these effects can be off-set by different policy measures and discussing their social desirability.

The closest contribution to this paper is [Lewis and Bowles \(1996\)](#). In a game theoretic approach, they explicitly address the question of how settlement surplus is allocated when parts differ in terms of time discounting rates. Furthermore, outside the context of law & economics, game theorist have extensively studied the role of time discounting on the “share of a pie”.⁴ It is therefore important to highlight that the issue addressed in this paper does not refer to a bargain problem where parts negotiate over the surplus of settling a case. Instead, our model shows that liquidity constrains play a significant role in determining the size of the surplus to be shared at the settlement stage of a suit. This work remains agnostic as regards the effects of liquidity constrains on the bargaining power of the parts, which we treat as constant. In the model section, we highlight how this setup leads to a different conclusion from those obtained by [Lewis and Bowles \(1996\)](#).

The paper is structured in the following way. TBD.

⁴See for example [Rubinstein \(1982\)](#)

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