Stepwise Liability: Between the Preponderance Rule and Proportional Liability

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There are two familiar decision-rules: the binary, preponderance of the evidence rule and the continuous, proportional liability rule. This Article proposes a thought-experiment. Instead of all-or-nothing or a continuous rule, the law can utilize a middle ground – assigning liability stepwise, according to the procedural progression of the case. I refer to this proposal as stepwise liability.

Stepwise liability relies on the gradual design of civil procedure. Under the current system, the plaintiff has to pass several procedural thresholds with increasing evidentiary requirements in order to proceed to trial. Examples are a motion to dismiss at the beginning and then a summary judgment. I propose that, corresponding to the procedural progression of the case, after surviving each step the plaintiff will be entitled to a gradually increasing share of the damages. Stepwise liability offers several advantages relative to the traditional rules. It provides partial compensation where the defendant's liability falls short of the 50% threshold, hence restoring incentives to take care. Unlike the proportional rule, this outcome can be achieved without major modifications to the existing decision rules. Unlike both rules, the proposal enables plaintiffs to cash-in with some award before trial. This Article analyzes the foregoing advantages of the proposal together with its potential pitfalls, such as over-deterrence and larger legal expenses.

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INTRODUCTION

There is a long-standing debate in the literature about the preferable decision rule: the discontinuous, preponderance of the evidence rule or the "smooth," proportional liability rule. The former, preponderance rule, assigns the victory to the plaintiff only in case it shows that her case is more probable than her rival's.¹ This is the default rule, at least in Anglo-American legal systems. In probabilistic terms, it is commonly thought that the plaintiff should win according to this rule if there is more than a 50% chance that her account is correct.² It thus presents an all-or-nothing decision rule. The latter, proportional rule allows for a partial remedy, based on the likelihood that the evidence justifies relief. Thus, a plaintiff who proves her case at a level of x% is entitled to that proportion of the damages, whether or not the evidence surpasses the 50% threshold. The proportional rule thus presents a continuous decision rule, which can be contrasted with the preponderance rule.³

Each rule presents, of course, advantages and disadvantages. The most salient advantage of the proportional rule concerns ex-ante deterrence, as the proportional rule, by and large, better incentivizes wrongdoers to take care, ex-ante.⁴ To demonstrate, a wrongdoer whose responsibility, in probabilistic terms, is always ~40% will never pay for her wrongdoing under the preponderance rule – an outcome that undermines the goal of deterrence. Likewise, a wrongdoer who is responsible for 70% will always be liable under the preponderance rule, and thus be incentivized to take excessive care. The proportional rule avoids these pitfalls. By contrast, the preponderance rule minimizes, under certain assumptions, the erroneous allocation of remedies between the two parties, in that specific case.⁵ More generally, the preponderance rule is "our current default burden of proof rule in civil cases."⁶ It better fits the current legal climate, where the judge has to choose between two versions: the plaintiff's or the defendant's.⁷

¹ E.g., CHRISTOPHER B. MUELLER & LAIRD C. KIRKPATRICK, 1 FEDERAL EVIDENCE § 3.5 (4th ed. 2009), *available at* Westlaw (explaining the standard).

² E.g., Andreas Glöckner and Christoph Engel, Can We Trust Intuitive Jurors? Standards of Proof and the Probative Value of Evidence in Coherence-Based Reasoning, 10 J. EMPIR. LEGAL STUD. 230, 242 (2013).

³ See, e.g., Michael Abramowicz, A Compromise Approach to Compromise Verdicts, 89 CAL. L. REV. 231, 235-36 (2001).

⁴ For a more elaborate discussion see Omer Pelled, *All or Nothing, or Something – Proportional Liability in Private Law*, THEORETICAL INQUIRIES IN LAW (forthcoming 2020).

⁵ David Kaye, The Limits of the Preponderance of the Evidence Standard: Justifiably Naked Statistical Evidence and Multiple Causation, 7 AM. B. FOUND. RES. J. 487, 507–508 (1982).

⁶ Mark Spottswood, *Proof Discontinuities and Civil Settlements*, THEORETICAL INQUIRIES IN LAW, at *2 (forthcoming 2020). *See also supra* note 1.

⁷ See, e.g., Pelled, supra note 4, at *25.

Indeed, while the proportional rule allegedly performs better than the preponderance rule "for all kinds of cases," it faces the "innate conservatism of lawyers when considering reforms to trial procedure."⁸

This Article contributes to the literature by presenting a thought-experiment – leveling the choice between the discontinuous, preponderance rule, and the continuous, proportional rule. Instead of all-or-nothing or a continuous rule, the law can utilize a middle ground – assigning liability stepwise, that is, a stepwise liability rule. Indeed, a few articles have suggested some variation of a mixed decision rule, which borrows elements from both extreme decision rules. Abramowicz, for instance, suggests a "compromise approach" where in relatively clear cases the fact-finder would return an all-or-nothing decision; and in closer cases the proportional rule would prevail.⁹ Along somewhat similar lines, Spottswood mathematically formulates a "logistic" burden of proof, which resembles the continuous, proportional rule around the 50% rule, and the traditional all-or-nothing rule at the extremes.¹⁰ Such, hybrid approaches to the legal decision rule can achieve the benefits of both. Abramowicz highlights the gains in risk reduction and fairness where the proportional rule applies in close cases.¹¹ Spottswood stresses that a hybrid rule can strike a better balance between the goals that each traditional rule achieves (that is, deterrence and reducing error rates).¹² Other relevant works on the two rules have suggested that each rule can better fit different areas.¹³

The current Article also introduces the idea of a middle rule – stepwise liability. However, unlike previous literature, the proposed middle rule is tied to the procedural progression of the case. To demonstrate, with each procedural step that the plaintiff passes – say, motion to dismiss and then summary judgment – the defendant's liability "jumps" such that the plaintiff will be able to drop and cash-in with a higher share. Thus, the proposal can correct some of the difficulties with the current rules. In particular, stepwise liability enables partial compensation where the defendant's liability falls short of the 50% threshold, hence restoring incentives to take care (think about cases in which plaintiffs survive a motion to dismiss but should fail at trial). Unlike the proportional rule (and the previous literature on hybrid rules), this outcome can be achieved without requiring the fact-finder to announce a probabilistic number. Thus, it better fits the role of judges in our system and necessitates little modifications in the existing legal landscape.

⁸ Mark Spottswood, Continuous Burdens of Proof, NEV. L.J., at *40, 42 (forthcoming 2020).

⁹ Abramowicz, *supra* note 3.

¹⁰ Spottswood, *supra* note 8.

¹¹ Abramowicz, *supra* note 3.

¹² Spottswood, *supra* note 8.

¹³ Cf., Pelled, supra note 4 (discussing the two rules in the context of different types of factual uncertainty).

Stepwise liability, then, harnesses the gradual design of the legal process to achieve an outcome that resembles in some respects the proportional rule. Nevertheless, stepwise liability's effects are by no means identical to the proportional rule. It does not merely suggest "jumps" in liability. As stepwise liability is tied to the procedural progression of the case, it enables the plaintiff to receive partial compensation relatively quickly, by dropping and cashing-in after surviving the first steps. This feature should be contrasted with the proportional rule – which also grants partial compensation, but only after a complete trial. This characteristic facilitates access to justice to financially-constrained plaintiffs.

The proposal, of course, also entails potential pitfalls, which largely mirror the foregoing advantages. As a pro-plaintiff regime, in which plaintiffs with relatively weak cases acquire partial award, it could result in over-deterrence and a flood of petty cases. The "stepization" of the legal process implicates legal expenses. And quick resolution might be inaccurate. I discuss these issues below and suggest possible ways to mitigate the concerns.

The Article proceeds as follows. The first section introduces stepwise liability by laying out the gradual design of current legal procedure and discussing alternative design choices for the proposed regime. The second section analyzes stepwise liability along several dimensions such as the role of judges, deterrence, settlements, legal expenses, etc. The third section concludes, and the Appendix contains technical discussion regarding the effects of stepwise liability on deterrence and settlements.¹⁴

I. THE PROPOSED REGIME

This section presents the proposed regime. To do so, I will first depict the current, piecemeal design of legal proceedings, which underlies the stepwise liability proposal. Against the backdrop of alternative designs choices, I will present two variations of the proposed rule.

A. The Piecemeal Design of Current Legal Proceedings

To understand how stepwise liability works one has first to lay out the piecemeal nature of the legal process. In a current civil lawsuit there are typically several stages that the plaintiff has to pass. These steps are crucial to the implementation of stepwise liability. The following will describe in more details the two common steps that a plaintiff typically has to pass before trial – the first is a motion to dismiss, and the second is summary judgment.

The defendant can move first to dismiss the plaintiff at the beginning, based on the plaintiff's pleading. According to prevailing precedents, the judge will dismiss the case if at that preliminary phase

¹⁴ Although the proposal can apply to any legal system that utilizes a gradual design, I focus on American civil procedure in order to simplify the discussion.

the plaintiff does not present "enough facts to state a claim to relief that is plausible on its face."¹⁵ Motions to dismiss are typically considered at an early stage, before discovery. Indeed, although "[t]he weight of evidence required to overcome a motion to dismiss is unclear,"¹⁶ this evidentiary standard is apparently interpreted as a relatively low one, and certainly below the 50% threshold required to win the case.¹⁷ Importantly, this standard was interpreted as an evidentiary standard concerning the strength of the evidence at that stage, namely, factually thin cases can be dismissed.¹⁸ To the extent the plaintiff survives dismissal (or the defendant refrains from moving to dismiss) the case proceeds to discovery.

Later on in the life of a case, and after pre-trial discovery, each party can move for "summary judgment."¹⁹ A case can be resolved at the summary judgment stage, without moving forward, "if the movant shows that there is no genuine dispute as to any material fact."²⁰ Note that unlike motions to dismiss, both the plaintiff and the defendant can move to show that the rival party's raises no "genuine dispute." Again, this standard expresses the assessed strength of the case at that stage. The precise evidentiary requirement to survive summary judgment, that is, the probabilistic translation of the "genuine dispute" standard, is likewise unclear; but is certainly higher than the one required to survive a motion to dismiss, and lower than the 50% threshold.

Finally, then, if the court denies a summary judgment motion (or the parties refrain from moving for summary judgment²¹), the case should proceed to trial (bench or jury). The plaintiff in a civil case wins only when she meets the well-known "preponderance of the evidence" standard, i.e., if the plaintiff's case is more likely than not.²² This evidentiary standard is commonly interpreted as a 50% threshold.²³

The stepwise liability proposal harnesses the foregoing piecemeal nature of the legal process. As we have seen, a typical case proceeds gradually. At each phase the fact-finder possesses more

¹⁵ For this so-called plausibility standard see Bell Atlantic Corp. v. Twombly, 550 U.S. 544, 570 (2007).

¹⁶ Derek E. Bambauer & Oliver Day, *The Hacker's Aegis*, 60 EMORY L.J. 1051, 1090 n. 264 (2011).

¹⁷ For a discussion of the precise evidentiary requirement of the motion to dismiss standard, in evidentiary terms, see, *e.g.*, Douglas A. Herman & Seth B. Sacher, *An Economic Analysis of Twombly/Iqbal with Applications to Antitrust*, 11 J. COMP. L. & ECON. 107 (2015).

¹⁸ By contrast, in other regimes threshold legal questions, *e.g.*, jurisdiction, res judicata, etc., are the only ground for dismissal.

¹⁹ For the proposition that summary judgment typically requires discovery see, *e.g.*, *Dunkin' Donuts of America v. Metallurgical Exoproducts Corp.*, 840 F.2d 917, 919 (Fed.Cir.1988) ("The Supreme Court has made clear that summary judgment is inappropriate unless a tribunal permits the parties adequate time for discovery" (citing *Celotex Corp. v. Catrett*, 477 U.S. 317, 326 (1986))).

²⁰ FED. R. CIV. PRO. 56.

²¹ The court can actually initiate summary judgment, though this is not the common practice. *See infra* note 34.

²² E.g., Eyal Zamir and Ilana Ritov, Loss Aversion, Omission Bias, and the Burden of Proof in Civil Litigation, 41 J. LEGAL STUD. 165 (2012).

²³ *E.g.*, *id*; *supra* note 2.

information – at the motion to dismiss stage, the fact-finder solely decides based on the pleading. At the summary judgment stage, the judge typically acquires more information – as the parties have already exchanged information through discovery proceedings. At the final, trial phase, the fact-finder also has the benefit of direct testimonies.

Relatedly and importantly, at each phase the evidentiary threshold is higher than the former. While the ultimate standard to win at trial, the proverbial more-likely-than-not standard, is commonly interpreted as a 50% threshold, the standard to survive earlier phases is lower. As we have seen, these pre-trial standards do not have a clear numerical value.²⁴ But obviously the standards progress, that is, it is harder to survive a summary judgment than a motion to dismiss, and it is harder to win at trial than surviving a summary judgment (hence the pre-trial standards should be set somewhere between 0% and 50%).

One can liken, then, the legal process to an imaginary ladder which the plaintiff has to climb. The first, motion to dismiss step requires, say, a 20% chance that the plaintiff's account is true. The second, summary judgment step equals, in probabilistic terms, to a showing of, say, 35% on the part of the plaintiff. The final, trial step is the familiar 50% probability. The precise probabilistic threshold of each step, as well as the number of steps in each case, can of course vary. In certain areas there are more steps to climb (think of certification of class actions); and in actuality the parties do not always trigger the steps. But the general picture is clear. Currently, a civil case proceeds gradually, with several steps that the plaintiff has to pass, whose evidentiary thresholds gradually rise.

B. Design Choices

We can now better sketch the mechanics of the stepwise liability regime. The following demonstrates two implementation versions and discusses other relevant practical considerations.

1. Sunk Steps and Disappearing Steps

Take a case in which the plaintiff has to pass two steps: a motion to dismiss, with an evidentiary threshold of 20%, and a summary judgment, with an evidentiary threshold of 35%. Suppose also that the damages are not disputed. In that case, stepwise liability should simply assign gradually increasing award to the plaintiff, based on the procedural stage that she crossed. Suppose, for simplicity, that the "price" for surviving a motion to dismiss (summary judgment) is 20% (35%). The following uses this

 ²⁴ For attempts to set a numerical threshold for pre-trial phases see Shay Lavie et al., *Adjusting Legal Standards*,
49 EUROPEAN JOURNAL OF LAW & ECONOMICS 33 (2020).

numerical example to elaborate on two design choices – that I refer to as "sunk steps" and "disappearing steps."²⁵

Sunk Steps. Under this alternative, the plaintiff who passes each step is guaranteed a partial award. That is, even if she loses later her gain is already sunk, and she "falls back" on the previous award. Practically, after passing each step the plaintiff can choose whether to quit or proceed, without affecting her partial award. In our numerical example, to the extent the plaintiff survives a motion to dismiss she will be guaranteed a sum of 20% percent of the damages; and if she passes the summary judgment stage she is guaranteed to get 35% of the damages. If the plaintiff wins at trial she receives the entire pie of damages.²⁶

Disappearing Steps. Under this version, a partial award disappears upon moving forward to the next stage. Hence, this version places a burden on the plaintiff – whether to quit and gain the partial award or proceed to the next step and risk losing that award. To illustrate, in our previous example a plaintiff who won on summary judgment can choose whether to cash in with 35% of the damages; or to proceed to trial, in which she receives nothing if she loses and the entire pie if she wins. Note that plaintiffs should prefer sunk steps to disappearing steps, as the latter exposes a plaintiff who chooses to move forward to a loss of her previous gains.

2. Additional Procedural Issues

Before proceeding to the merits of the proposal, the following briefly discusses two additional procedural issues.

Setting the Relevant Numbers. Who sets the relevant figure at each step, e.g., that a motion to dismiss is "worth" 20%, etc.? I envision a regime in which these "prices" for each procedural step are pre-determined by policymakers: by the Supreme Court's precedents or through the Rules of Civil Procedure. In the following I will accordingly assume a given set of prices. There are, of course, alternative design options, e.g., letting the judge decide these numbers on a case-by-case basis,²⁷ or a mutually agreed set of numbers.²⁸ These design options seem inferior, and, at any rate, lie beyond the scope of this Article.

²⁵ I thank Alon Klement for suggesting this terminology.

²⁶ This in essence corresponds to a preponderance rule beyond the 50% threshold. One can of course think of other versions, *e.g.*, a continuous rule beyond the 50% threshold. Regardless of the possible advantages of such a rule, I believe that sticking to the preponderance rule beyond the 50% threshold is the easiest option to implement. ²⁷ In that option the judge should apparently announce the relevant numbers at the beginning, in order to provide that information to the parties. This option leaves more discretion to the judge to "tweak" the standard according to the circumstances of each case, but it also requires the judge to express a numerical price on each standard (*cf.*, subsection II.A. below, which discusses the difficulties in expressing probabilistic thresholds).

²⁸ This option, however, requires some cooperation among the parties and thus seems problematic in practice.

Should the numbers correspond to the probabilistic threshold? In the numerical example above, the price (20% and 35% of the damages) fits the evidentiary threshold that is required to survive each step. But this need not be the case. An alternative approach is setting the price (in numerical terms) independently of the verbal standard.

Although the former approach might have some advantages,²⁹ in this Article I take the latter avenue. In particular, I see the main advantage of the latter approach in the flexibility it allows in setting the relevant numbers – for instance, to the extent stepwise liability creates over-deterrence, policymakers could lower the "price" for surviving each step.³⁰

Disputed Damags. Thus far I have assumed that damages are not disputed. What happens if damages are disputed? In that case it is impossible to award the plaintiff her proportion of the damages before trial.

The answer is two-fold. First, I envision stepwise liability as subject to the discretion of the presiding judge. A case in which there is a serious dispute with regard to the damages possibly justifies giving up the stepwise liability option. There are many cases in which the issue of damages appears relatively simple – statutory damages lawsuits, for instance, seem highly suitable for stepwise liability. Second and relatedly, where she deems it appropriate, the judge can simply split the damages from the determination of liability.³¹ Indeed, in actuality it is common for judges to split the adjudication of liability and damages, where liability is determined first.³²

Further "Stepization" of the Legal Process. The proposed regime envisions gradually increasing steps – in our example, in order to reach trial, the plaintiff has first to pass a motion to dismiss and then to survive summary judgment. However, in the current practice these steps do not always materialize. Rather, they triggered at the parties' discretion. Only the defendant can trigger a motion to dismiss the

²⁹ The former approach could clarify the legal standard. Indeed, the legal standard concerning motions to dismiss allegedly brought "vague and . . . inconsistent judicial precedents" that implement it. Arthur R. Miller, *Widening the Lens: Refocusing the Litigation Cost-and-Delay Narrative*, 40 CARDOZO L. REV. 57, 95 (2018) (critically discussing the *Twombly* dismissal standard). A clear standard, in numerical terms, can perhaps push judges to give it more consideration and make appellate monitoring easier.

 $^{^{30}}$ I further discuss these issues in subsection II.B below and in Section C to the Appendix. In addition, the second approach avoids the need to define legal thresholds in numbers. *Cf.*, subsection II.A (arguing that judges, but not necessarily other policymakers, have difficulties in defining a specific case by numerical terms).

³¹ Accordingly, under stepwise liability, a plaintiff in a bifurcated case who passes each step in the liability phase can decide whether to proceed a full determination of the defendant's liability; or move on to the damages phase with partial liability.

³² See, e.g., Steven S. Gensler, *Bifurcation Unbound*, 75 WASH. L. REV. 705 (2000). As a side note, bifurcation, in our context, can save trial time – as "even in cases where the plaintiff prevails on liability . . . the parties will often settle instead of proceeding with the damages stage." *Id.*, at 706. *Cf.* Judge David L. Tobin, *To B... Or Not To B... "B..." Means Bifurcation*, 74 FLA. BAR. J 14, 14 (2000) (a federal judge attesting that he has "bifurcated hundreds" of cases to liability and damages for several years but "I have tried only one case in which the issue was damages!").

plaintiff's case; and each party can force her *rival* to survive summary judgment.³³ Importantly, the plaintiff cannot compel the judge to examine whether *her own* claims cross one of these thresholds.³⁴ It is the defendant who possesses that power, and she may abstain from so doing for various reasons.

Stepwise liability, then, necessitates a more complete "stepization." One approach is to mandate the plaintiff to pass certain procedural stages. In several contexts the law does erect mandatory steps, that is, it requires judicial approval in order to proceed. A notable example is class actions – the law requires "certification" of a class action before proceeding to trial.³⁵ This approach, though, largely deviates from the current adversarial climate.

A milder approach, which I endorse in this Article, is to give the plaintiff the power to move the judge to decide whether she meets the relevant legal threshold (such that her own case is terminated if she fails to pass that threshold). To heed the importance of such a power, suppose that a plaintiff (knowingly) files a questionable case.³⁶ Such a plaintiff may wish the court to rule, as soon as possible, on a motion to dismiss. This could be useful in order to clear the cloud over her own claims, signal the judge's position, and avoid a losing course of action. Under the current law the plaintiff cannot invite such an early assessment of her case, and she has to wait for the defendant to move to dismiss. However, defendants do not always move to dismiss even if they apparently have sufficiently strong claims.³⁷ The power to self-terminate her case should she fail to meet the relevant legal threshold, helps, therefore, to implement stepwise liability.

II. THE CASE FOR STEPWISE LIABILITY

We can now turn our look to examine the major benefits and flaws of the proposed regime, relative to the more familiar ones – the preponderance rule and proportional liability. This section discusses

³³ That is, each party can move for a summary judgment and avoid a full trial where the *other party's* allegations raise "no genuine dispute." In that case, the moving party wins the entire case. *See supra* notes 19-21 and accompanying text.

³⁴ It should be noted that courts do have the capacity to spontaneously take action, although it is not the common practice. *Cf.*, FED. R. CIV. PRO. 56(f)(1), which authorizes courts to grant summary judgment to nonmovant, but recommends in these cases to "first invite a motion" by one of the parties. *Id.*, advisory committee's note to 2010 amendment. In any case, the statement in the text holds – the plaintiff cannot compel the judge to decide that her case survives dismissal/summary judgment.

³⁵ *Cf.*, Shay Lavie, *Tiered Certification*, 19 THEORETICAL INQUIRIES IN LAW, 69, 73-83 (2018) (discussing the requirement for a mandatory intermediate stage in class actions and proposing another, preliminary phase).

³⁶ Plaintiffs may be bound to file (possibly) weak lawsuits for many reason, one of which is the better information that defendants typically possess in certain areas. For a discussion of asymmetric information in these contexts see, *e.g.*, Shay Lavie & Avraham Tabbach, *Litigation Signals*, 58 SANTA CLARA L. REV. 1, 6-10 (2018).

³⁷ In practice, defendants may be bothered by making the wrong "first impression" on the judge. *E.g.*, Legal Update, *Risky Business: Motions to Dismiss*, PRACTICAL LAW (Oct. 8, 2013), *available at* https://1.next.westlaw.com/9-544-

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stepwise liability, based on our recurrent example and the foregoing two versions, sunk and disappearing steps, in light of several important considerations, e.g., deterrence, settlements, etc. Mostly, the proposed regime can achieve better incentives to take care than the preponderance rule; and is easier to implement than the proportional rule. It can also ease the burden from financially constrained plaintiffs and can affect settlements in various, subtle ways.

A. Probabilistic Adjudication and the Role of Verdicts

An important benefit of stepwise liability over the proportional rule is the former's ease of implementation within the current system. Proportional liability (and other, hybrid solutions that rely on some form thereof) forces the fact-finder – a judge or a jury – to announce a probabilistic number at the end of a trial. The preponderance rule, by contrast, solely requires the fact-finder to determine the winner based on a given legal standard. As will be explained below, stepwise liability resembles the preponderance rule in this respect.

The issue of probabilistic adjudication provides various reasons to prefer the all-or-nothing, preponderance rule over proportional liability.³⁸ For instance, fact-finders may find it "difficult to translate subjective estimates of probabilities into numbers."³⁹ Similarly, one can argue that fact-finders "simply think better with standards than with numbers."⁴⁰

A related line of argument concerns the acceptability of legal verdicts and the public message sent thereby. Allegedly, the fact-finder should provide in its verdict "a statement about what happened" rather than "a statement about the evidence presented at trial."⁴¹ Such a declaration is, according to some views, necessary in order for the public to accept the verdict and "affirm[] [the] behavioral message" of the legal rule.⁴² The preponderance rule conforms to this idea. Regardless of the strength of the evidence, the fact-finder cuts the case, for the plaintiff (if the evidence crosses the 50% threshold) or the defendant (otherwise). This binary approach holds even in close cases – "*dura lex, sed lex.*"⁴³ By contrast, the proportional rule fails in this respect. "[I]f the factfinder believes that there is a 30%

³⁸ See generally Abramowicz, supra note 3, at 250-255.

³⁹ Abramowicz, *supra* note 3, at 250-251.

⁴⁰ *Id.*, at 252. Indeed, in a previous work my co-authors and I found that laypeople have major difficulties in translating legal standards to numbers, whereas they are capable of reasonably adjudicate cases based on the very same standards. *Supra* note 24, at 38-40, 45.

⁴¹ Charles Nesson, *The Evidence or the Event? On Judicial Proof and the Acceptability of Verdicts*, 98 HARV. L. REV. 1357, 1358 (1985).

 $^{^{42}}$ *Id.* A clear "statement" is needed as "the legal system is to affirm and dramatize the rule that has allegedly been violated." *Id.*

⁴³ Or, from Latin: "Hard law, but law." BLACK'S LAW DICTIONARY, Legal Maxims (11th ed. 2019), *available at* Westlaw.

probability that a door is completely open and a 70% probability that the door is closed, it cannot state that the door is 30% open and 70% closed, as this cannot be an existing factual state."⁴⁴

While one can debate the wisdom of the foregoing, this reasoning is definitely a major consideration in the current debate over the proportional rule. Indeed, courts have allegedly hesitated to implement the proportional rule for these very reasons.⁴⁵ Corrective justice theorists resist the proportional rule and support the more traditional, preponderance rule on somewhat similar grounds.⁴⁶

Against this backdrop, it is easy to see that stepwise liability is considerably easier to implement in the current legal landscape than the proportional rule. At no time does the fact-finder need to declare a number that corresponds to her assessment of the evidence.⁴⁷ Rather, under the proposed stepwise rule, the fact-finder's role remains the same – deciding whether the plaintiff's passed the relevant legal threshold (motion to dismiss, summary judgment, and/or trial). As judges routinely determine whether a specific set of facts meets a legal standard, in this sense the proposal does not carry any change. Accordingly, the decisions under the proposed rule could emit the same public message that is currently sent by courts.

In sum, then, stepwise liability fits the existing role of courts and is thus easier to implement within the current legal framework than the proportional rule. In this sense, the proposal mimics one of the major advantages of the traditional, preponderance rule. This advantage of stepwise liability equally pertains to both the sunk and the disappearing steps versions.

B. Deterrence

We have seen that the proportional rule is rejected, at least in part, because it deviates from the current practice of judges. This concern notwithstanding, a major advantage of the proportional rule is creating better incentives for wrongdoers. Where wrongdoers calculate their actions in a state of uncertainty, proportional liability – rather than the preponderance rule – pushes them to fully internalize the harm they create.⁴⁸ To take a trivial example, a physician whose chances of being found liable are 70% will

⁴⁴ Pelled, *supra* note 3, at 25.

⁴⁵ Nesson, *supra* note 41, at 1383. *But see* Abramowicz, *supra* note 3, at 255-264, for a different approach and criticism of Nesson's arguments.

⁴⁶ See Pelled, *supra* note 3, at 25 ("the very formalism of corrective justice presupposes formal equality between the parties . . . The combination of . . . basing the decision only on one of the possible factual states and formal equality . . . leads to the adoption of the preponderance of the evidence rule.").

⁴⁷ Recall that in the variation of stepwise liability I discuss throughout the Article the relevant "price" for each threshold is already set – by policymakers, rather than the trial court.

⁴⁸ Pelled, *supra* note 4, at *10-14 (discussing states of mutual uncertainty).

always pay the entire damages under the preponderance rule (over-deterrence); and vice versa, a 30% liability will be translated to no liability under the preponderance rule (under-deterrence).

In general, stepwise liability rectifies at least some of the difficulties that are associated with the preponderance rule. In under-deterrence situations, under the 50% threshold, the plaintiff is entitled to at least part of the damages should she manage to pass pre-trial stages. In addition to imposing some liability below the 50% threshold, the proposal also facilitates quick pay, before reaching a full trial, and thus eases access to justice for financially-constrained victims (relative to the proportional rule).⁴⁹ However, the proposed regime will not rectify over-deterrence situations under the preponderance rule. Beyond the 50% threshold the plaintiff wins the entire pie under both the proposed regime and the preponderance rule.⁵⁰ By contrast, the proportional rule rectifies both under- and over-deterrence.

As a generalization, then, stepwise liability resembles proportional liability in consistent underdeterrence situations (liability<50%), and it is identical to the preponderance rule in consistent overdeterrence situations (liability>50%). Subsections A and B to the Appendix analyze more complicated settings to better understand the effects of the proposed regime on deterrence where defendants calculate their behavior ex-ante are under uncertainty with regard to the future realization of their acts. The main points that emerge are as follows.

First, there might be important differences between the sunk and the disappearing steps versions. By and large, the disappearing steps version is closer to the preponderance rule. To demonstrate, if we think that the plaintiff is always optimistic – and she always proceeds to trial – then stepwise liability is identical to the preponderance rule. More generally, the more we think that the plaintiff suffers from the tendency to mistakenly proceed to trial, the more the disappearing steps version approaches the preponderance rule.

Second, it is clear that stepwise liability regimes result in over-deterrence relative to the preponderance rule – after all, stepwise liability grants partial compensation below the 50% threshold and full compensation thereafter. However, the precise comparison between stepwise liability and the preponderance rule is situation dependent. Sometimes the preponderance rule is optimal and stepwise liability over-deters.⁵¹ Sometimes both the preponderance rule and stepwise liability over-deter, where

⁴⁹ I elaborate on this point below, *see infra* subsection II.D.4.

 $^{^{50}}$ This is true according to the main versions presented in the Article – one can think of other variations. *See supra* note 26.

⁵¹ This occurs, for instance, where the ex-ante distribution of different states of the world is symmetric around the 50% threshold. *See* Appendix B.

the latter over-deters to a larger extent.⁵² Sometimes both rules under deter.⁵³ And sometimes the preponderance rule under-deters and stepwise liability over-deters.⁵⁴

Third and relatedly, while stepwise liability would always generate a higher liability than the preponderance rule, by decreasing the "price" for passing each step one could mitigate this outcome. The fact that the expected liability under the preponderance rule serves as a lower bound for the outcome under stepwise liability leads to several inferences. Subsection C to the Appendix accordingly generalizes: where the preponderance rule over-deters, stepwise liability perforce over-deters. Where the preponderance rule under-deters, and stepwise liability over-deters, policymakers could reduce the price for each step such that the expected liability under stepwise liability is optimal.

* * *

Deterrence is a main advantage of proportional liability over the preponderance rule, and it is important to understand the precise effects of stepwise liability in this respect. Relative to the preponderance rule, the proposed regime increases the defendant's expected liability, hence it can address under-deterrence situations (for example, negligence that results in evidentiary weak cases). However, stepwise liability implicates risks of over-deterrence. While these risks do exist, below are a list of reasons for which the case for stepwise liability, in my view, holds.

First, it is true that stepwise liability increases deterrence. But the scope of over-deterrence varies, and is situation-dependent; sometimes both stepwise liability and the preponderance rule under-deter. More generally, in these situations policymakers can adjust the price for each step downward – a lower price mitigates or even eliminates the over-deterrence problem.⁵⁵

Second, similarly to the proportional rule, stepwise liability might be implemented selectively.⁵⁶ It is tempting to utilize the proposed regime in areas in which we think that there is under-deterrence, and we would like victims, even with weak cases, to receive partial (and quick) compensation.

Third, there are various other mitigating factors. To the extent the plaintiff is overly optimistic or misinformed, the disappearing steps version brings the proposed regime closer to the preponderance

 $^{^{52}}$ See, e.g., the discussion regarding row 4 in Table 1 Appendix A (where the defendant expects that her liability is at the level of 50% half of the time and 30% in the other half). More generally, the statement in the text holds where there are relatively more 50%+ cases. See Appendix B.

⁵³ See, e.g., the discussion regarding row 5 in Table 1, Appendix A (where the defendant's liability is at the level of 40% half of the time and 20% in the other half).

⁵⁴ *See* the discussion regarding row 2 in Table 1, Appendix A (where the defendant expects that her liability is at the level of 80% half of the time and 40% in the other half). More generally, where the ex-ante distribution of cases is biased in the direction of weaker cases, the preponderance rule under-deters (weak cases gain nothing); and stepwise liability could over- or under-deter. *See* Appendix B.

⁵⁵ Along the same lines, policymakers could address over-deterrence situations by tweaking the relevant legal threshold upward.

⁵⁶ See infra text accompanying notes 91-93.

rule and mitigates over-deterrence. Likewise, under each regime the parties can well settle – where they typically compromise their positions and expected gains, and, by extension, reduce the under-deterrence problem.

Finally, while this issue is hotly debated, many believe that, as a rough generalization, underdeterrence is a more pressing problem than over-deterrence in the current climate. In that case, the proposed rule is an improvement relative to the default preponderance rule. Legislative amendments and new precedents have made it harder for plaintiffs to file and litigate a lawsuit in the last decades in the U.S.⁵⁷ Legal expenses and informational gaps hinder plaintiffs from filing claims, and skew the distribution of cases in courts.⁵⁸ Furthermore, forward-looking wrongdoers, who can control and predict the strength of the evidence in a prospective case, can avail themselves of the preponderance rule. Under the preponderance rule a sophisticated wrongdoer can in theory freely commit a tort as long as it keeps the evidence against it below the 50% threshold.⁵⁹ While this risk also exists under stepwise liability – e.g., the wrongdoer can keep the strength of the evidence at the 19% level, to avoid the first "step" – its scope is narrower.

C. Settlements

It is well-known that most cases settle. Settlement save legal expenses, for both the parties and the legal system. However, settlements can compromise various other goals, e.g., deterrence.⁶⁰ Regardless of the social value of settlements, the stepwise liability regime affects settlements, and these effects can be subtle and intricate.⁶¹ I consider in this subsection two influential settlement theories. The first maintains that settlements fail due to the parties' divergent expectations, in the form of mutual optimism with regard to the outcome.⁶² The second attributes settlement failures to asymmetric information, e.g., the defendant knows whether she is liable or not, whereas the plaintiff only knows the general probability that the defendant will be found liable (and not whether that specific defendant is negligent).

⁵⁷ See, e.g., Patricia W. Hatamyar Moore, *The Anti-Plaintiff Pending Amendments to the Federal Rules of Civil Procedure and the Pro-Defendant Composition of the Federal Rulemaking Committees*, 83 U. CIN. L. REV. 1083 (2015) (the "anti-plaintiff" amendments to discovery rules); Bell Atlantic Corp. v. Twombly, 550 U.S. 544 (2007) (raising the pleading standard).

⁵⁸ Indeed, empirical research suggests that many victims fail to bring good claims to court, particularly in certain areas such as medical malpractice. For a survey of the under-enforcement problem see, *e.g.*, Ehud Guttel et al., *Torts for Nonvictims: The Case for Third-Party Litigation*, 2018 U. ILL. L. REV. 1049 (2018).

⁵⁹ For a more elaborate discussion on this point and various examples, *e.g.*, in the context of toxic torts, see Spottswood, *supra* note 8, at *9-11. Note that this tactic is irrelevant in the reverse case, as victims do not commit the tort and cannot typically control the level of evidence in their favor.

⁶⁰ Cf., the seminal Owen M. Fiss, Against Settlement, 93 YALE L.J. 1073 (1984).

⁶¹ *Cf.*, Spottswood, *supra* note 6 (discussing the intricate effects of various decision-rules on settlements).

⁶² For a comprehensive discussion of divergent beliefs and their effect on settlements *see* J.J. Prescott & Kathryn E. Spier, *A Comprehensive Theory of Civil Settlement*, 91 N.Y.U. L. REV. 59, 75-80 (2016).

The analysis concerning the two versions of stepwise liability is, by and large, similar. The following first considers, in detail, the sunk steps version; then, I will briefly highlight the unique features of the disappearing steps regime.

1. Sunk Steps

We will first discuss the decision to move forward or drop the case after each step. Recall that under the sunk steps version the plaintiff, after passing each step, is guaranteed the price for that step regardless of the outcome at later stages. The plaintiff under the sunk steps regime will move forward if the legal expenses, from that point, justify the remaining expected award. The following illustrates:

Illustration (a). Suppose that the damages are 200, and the plaintiff expects to win at trial with probability 60%. The expected judgment, from the plaintiff's perspective, is thus 120. Suppose also that the plaintiff has passed the summary judgment stage, and that the concomitant pre-determined "price" is 35% of the damages. Therefore, the plaintiff now receives regardless of the outcome at trial 35%*200=70. If she moves forward and wins, she receives the remainder of the damages, 130. Assuming that the plaintiff expects to win at trial with the same probability, 60%, the expected value of moving forward after surviving summary judgment is 60%*130=78. The plaintiff will thus move forward and bear the remaining legal expenses if the costs of doing so are smaller or equal 78.

It seems likely that the plaintiff in these situations will indeed move forward. Given that the plaintiff has decided to file the case from the beginning, it is plausible to believe that the overall legal expenses are lower than 120, the expected value of the entire case. Hence, unless trial is particularly costly relative to pre-trial phases, we should expect the plaintiff to proceed under the sunk steps regime.

Divergent Expectations

The following will analyze the decision to settle under the sunk steps regime, assuming the divergent expectations theory of settlements.

Lower stakes. In general, the lower the expected outcome at trial the more likely the parties to settle. The sunk steps version provides a guaranteed amount after passing each step. Hence, after each step the stakes are lower and, other things being equal, settlements are more likely. Intuitively, the parties have fewer incentives to fight where part of the compensation is guaranteed, and the remaining pie is thus smaller.

Lower legal expenses. The lower the legal expenses, other things being equal, settlements are less likely. Intuitively, parties that need to spend less on litigation are more inclined to go to court. In the context of stepwise liability, after each step some of the legal expenses have already been spent, such that the remaining legal expenses are lower. Hence, settling after passing each step is less likely, other things being equal.

We showed that, under the sunk steps regime after each step the stakes are lower (more settlements) but the remaining legal expenses are also smaller (more litigation). What is the net effect of these contradictory factors? Appendix D shows that settlements are more likely after each step to the extent the legal expenses of both sides decrease at a lower rate than the reduction in the remaining stakes, and vice versa. The precise effect of stepwise liability in this respect is, therefore, hard to predict.⁶³

Judicial signal and mutual optimism. The divergent expectations model assumes that the parties differ with respect to their (subjective) expectations from trial. This gap in expectations hinders settlements, as it is harder for optimistic parties to settle. Thus far I have assumed that passing each step does not affect the parties' expectations from trial. However, in actuality each "step" provides the judge with the opportunity to express her opinion on the case. This information presumably narrows the expectation gap between the parties, facilitating settlements.⁶⁴

In this sense, then, the parties are more likely to settle after each step. Indeed, examples could be drawn from other contexts. Preliminary injunction decisions, for instance, implicate the merits of the case – hence they inform the parties about the judge's position and facilitate settlements.⁶⁵ Another example for this reasoning could be drawn from the certification step in class actions – a fact-intensive procedure that conveys to the parties information regarding the likely result at trial. Indeed, it is well-known that the parties often settle immediately after (and if) the class manages to navigate the certification step.⁶⁶ There are other examples that share a similar spirit.⁶⁷ In sum, the signal from the judge under each step seems as an important contribution to settlements under the proposed regime.

One can argue, though, that these incentives to settle after passing each step exist already, without rewarding the plaintiff for passing each step. However, as I have shown above, the proposed regime

 $^{^{63}}$ Thus far I have analyzed the incentives to settle upon passing each step. These considerations, of course, also have ex-ante effects – to the extent the parties anticipate that the piecemeal nature of the process encourages settlements, the proposed regime should induce them to settle at the beginning.

⁶⁴ It seems natural to think that the message from the judge should bring optimistic parties closer to the ground and thus narrow the expectation gap. To the extent the judge's message widens the expectation gap, the statement in the text should be reversed. Note also that pessimistic parties (and parties that share the same expectations concerning trial) should always settle under this model. *See also* Appendix D.

⁶⁵ For an analysis along these lines see Thomas D. Jeitschko & Byung-Cheol Kim, *Signaling, Learning, and Screening Prior to Trial: Informational Implications of Preliminary Injunctions*, 29 J.L. ECON. & ORG. 1085 (2012).

⁶⁶ See, e.g., Melissa Hart, Subjective Decisionmaking and Unconscious Discrimination, 56 ALA. L. REV. 741, 780 (2005) (citing various "[s]tudies [that] indicated that most cases in which a class is certified will settle without litigating the merits of the claims.").

⁶⁷ See, e.g., M. Howard Morse, *Product Market Definition in the Pharmaceutical Industry*, 71 ANTITRUST L.J. 633, 634 (2003) (in the context of antitrust, "[p]rivate actions . . . often settle, after motions to dismiss or motions for summary judgment . . . [and] there are only a handful of court decisions").

provides a more comprehensive "stepization" of the legal process.⁶⁸ Hence, it should be useful in further reducing the gap in the parties' (subjective) beliefs regarding the outcome, encouraging settlements.

Additional factors. The foregoing implicitly assumed that parties are risk-neutral. However, for risk-averse parties, who desire to avoid the risk of trial, settlements are relatively more attractive.⁶⁹ The sunk steps version guarantees a certain amount regardless of the outcome at trial. Thus, it "hedges" the plaintiff's side and reduces the overall risk from litigating, particularly after passing each step. In a sunk steps regime, then, and other things being equal, risk-averse parties may be more likely to go to trial.⁷⁰

Stepwise liability could affect the indirect costs of litigation in other ways. The sunk steps version, in particular, enables quick payment for financially-constrained parties. This effect, in essence, reduce legal expenses and may again discourage settlements.

In addition, stepwise liability should change the content of settlements. The proposed regime enables the plaintiff a guaranteed amount after surviving each step, and hence it raises her payoff. This should enable the plaintiff to extract from the defendant a better settlement.

Asymmetric Information

The foregoing results by and large hold under the asymmetric information theory of settlements.

Lower stakes and legal expenses. In general, as before, the lower the stakes of a trial, and the larger the legal expenses, the parties are more likely to settle under the asymmetric information theory.⁷¹ These intuitions work in contradictory directions – after each step the stakes are lower but the legal expenses are lower too. Hence, the precise effect of stepwise liability is situation-dependent. Appendix D shows that, under certain assumptions, and contrary to the foregoing analysis, if the ratio of remaining legal expenses to damages remains the same after each step, settlements are less likely; settlements can be more likely only if the decrease in costs after each step is smaller than the reduction in the expected damages.

Additional information. The asymmetric information theory maintains that settlements fail due to informational gaps. To the extent that each step provides information, settlements are, of course, more likely under stepwise liability. Indeed, interim steps often implicate the exchange of private information: affidavits, depositions, discovery, and even through the mere filing of motions and

⁶⁸ Recall that it is typically defendants who can trigger these steps, and sometimes they refrain from invoking this power. *See supra* notes 33-37 and accompanying text.

⁶⁹ See, e.g., Prescott & Spier, supra note 62, at 73-75.

⁷⁰ An interesting parallel is the practice of "high-low" agreements, which hedge the parties' risk and may drive them to go to trial rather than reach a full settlement. *See generally* Prescott & Spier, *supra* note 62.

⁷¹ See generally, Lucian A. Bebchuk, *Litigation and Settlement under Imperfect Information*, 15 RAND J. ECON. 404, 409-10 (1984).

answers to these motions. As before, the more complete "stepization" of the legal process under the proposed regime should thus encourage transmission of information and induce settlements relative to the current regime. To the extent the parties anticipate that private information would later be revealed, they are also more likely to settle ex-ante.

Additional factors. As before, to the extent stepwise liability lowers related costs of litigation, e.g., the risk of trial or the need to finance litigation, settlements are less likely. Similarly, the higher expected payoff for the plaintiff under the proposal should raise the amount for which the parties settle.

2. Disappearing Steps

The foregoing analysis largely pertains to the disappearing steps version. There are, though, several important distinctions between the two regimes.

Dropping. Under the disappearing steps regime proceeding to trial is less attractive for the plaintiff, as there is no guaranteed amount in the event of a loss. Hence, the plaintiff is more likely to drop after passing each step. Consider the following:

Illustration (b). Consider the numerical example in illustration (a) above, and suppose that the plaintiff survives a summary judgment, with a pre-determined price of 35% of the damages, such that she can cash-in with 35%*200=70. If the plaintiff proceeds, she expects to gain 200 with probability 60%, or, 120. In that case, the plaintiff is willing to spend up to 120-70=50 in order to move forward.

Recall that in the sunk steps version the plaintiff was willing to spend up to 78 to proceed.⁷² This suggests that when the legal expenses associated with moving from summary judgment to trial are in the range 50-78, the plaintiff drops under the disappearing steps rule and proceeds under the sunk steps regime.

The inclination to drop also depends, of course, on various other factors. To the extent the plaintiff is risk-averse, trial becomes even less attractive, and cashing-in is more likely. A higher pre-determined price makes trial less attractive, and can push plaintiffs to drop. Optimism makes a trial more attractive – and a super-optimistic plaintiff will always move forward.

Lower stakes. The disappearing steps version no longer reduces the stakes once the plaintiff decides to proceed after passing each phase. Observe that once the plaintiff moves forward, her previous gains are eliminated; hence, from that point, both parties again fight over the entire pie, whereas the remaining

 $^{^{72}}$ Observe that this difference results from the state of the world in which the plaintiff loses under the sunk steps option (40% probability) – but still receives the guaranteed amount (70). Or, 78-50=28=0.4*70.

litigation expenses are lower (similarly to the current practice, in essence).⁷³ This characteristic neuters the advantage that the sunk steps regime possesses in this respect.

Risk. The sunk steps regime "hedges" the plaintiff's bet. By contrast, the plaintiff who decides to proceed under the disappearing steps regime faces a riskier choice. This should make trial under the disappearing steps regime less attractive, inducing risk-averse parties to settle (or drop).

* * *

The proposed regime has various subtle effects on the odds of settlements. The most important insights are the following. First, the effect of surviving each step on settlements is ambiguous, as there are various moving forces in the background. An important issue in this respect is the information that the mere survival of each step conveys, as this information could streamline settlements. This factor seems most important where we attribute settlement failures to the parties' optimism. Second, there are some differences between the two versions of stepwise liability. By and large, the riskier option, the disappearing steps regime, encourages dropping after each step; by contrast, if the plaintiff decides to proceed, the sunk steps version induces more settlements. Of course, the parties could ex-ante heed these effects, and settle accordingly at the beginning.

One could wonder whether the proposal is different from the current practice, in which parties typically settle after the intermediate steps.⁷⁴ I argue that the proposed regime differs from the current practice in at least two respects. First, in the current regime interim decisions indeed provide information, hence parties often settle thereafter. However, the proposal suggests a more complete "stepization," which should enhance the flow of information through judicial decisions and encourage settlements. Second, the proposal also affects the content of settlements relative to the existing framework. It sets a clear price for each step (which can be tweaked by policymakers), and, as it enables the option to cash-in with a certain award, it improves the plaintiff's position.

D. Additional Considerations

1. Legal Expenses

Will stepwise liability reduce or increase litigation costs? There are reasons to think that the proposed regime will raise, overall, litigation costs. The following briefly highlights several effects.

⁷³ The statement in the text should be qualified where the plaintiff moves forward, say, after a motion to dismiss, in order to drop after the next stage, e.g., summary judgment. In any case, the sunk steps regime clearly reduces the stakes throughout the life of a case to a larger extent than the disappearing steps regime.

⁷⁴ Supra notes 65-68 and accompanying text.

Costs of stepization. As elaborated above, stepwise liability adds more steps to the process relative to the current practice, hence it increases legal expenses to both the parties and the judge.⁷⁵

Filing of cases. The proposed regime raises the plaintiff's payoffs. Hence, it likely motivates victims to bring cases that are not filed under the current, preponderance liability regime. To illustrate, suppose that a plaintiff can survive a motion to dismiss but her odds at later stages are slim. The capacity to cash-in after quickly encourages filing of these cases. More filings of course generate more legal expenses.⁷⁶

Dropped cases. The addition of steps could also reduce legal costs. First, cases that fail to survive these steps are dismissed, saving future legal costs. Second, plaintiffs that survive these steps could drop and cash-in. As abovementioned, this effect is most conspicuous under the disappearing steps version.⁷⁷ We should expect risk-averse and financially-constrained plaintiffs, for whom it is harder to proceed, to drop at a higher rate.

Investment in litigation. Another possible factor in favor of stepwise liability is the incentives to invest in litigation. Consider a case that goes to trial. As the stakes grow larger, parties likely have bigger incentives to invest in litigation – spending more lawyer-hours, expending on experts, etc. The all-or-nothing, preponderance rule raises the stakes, as the outcome is binary. It thus creates stronger incentives to invest in litigation than the continuous rule. This effect is the strongest in close cases, where each party's additional investment can relatively easily tip the scales.⁷⁸ Stepwise liability lies between the preponderance and the continuous rules –some cases that would have ended in an all-or-nothing outcome under the preponderance rule would result in an intermediate award under the proposed regime. Hence, the proposal should decrease the incentives to invest in litigation relative to

⁷⁵ See supra subsection 0 (proposing that plaintiffs would be able to move to terminate their own case, conditional on failing to survive a given legal threshold, and explaining why currently defendants do not always trigger these steps).

⁷⁶ The increase in filings, however, may have other, side-benefits. For instance, it can enhance enforcement precisely where the defendant consistently violates the law but the evidence are not sufficiently strong. For the proposition that the private value of a lawsuit diverges from its social value, for instance in terms of deterrence, see, *e.g.*, Steven Shavell, *The Fundamental Divergence between the Private and the Social Motive to Use the Legal System*, 26 J. LEGAL STUD. 575 (1997).

⁷⁷ See supra subsection II.C.2. (discussing dropping under the disappearing steps version).

⁷⁸ Close cases, around the 50% evidentiary threshold, are also considered the most likely to reach trial rather than settle. *See generally* George L. Priest & Benjamin Klein, *The Selection of Disputes for Litigation*, 13 J. LEGAL STUD. 1 (1984).

There may be, then, various effects of the proposed regime on legal expenses, and it is hard to accurately predict its precise outcome. Overall, though, one can conclude that a proposal that highlights the stepwise nature of the legal process is bound to add steps – and costs – to the legal process.

2. Allocation of Errors

The literature that compares the preponderance and the proportional liability rules often highlights the different allocation of error costs between the parties under each decision-rule – that is "the amount of dollars that are either wrongfully awarded to an undeserving plaintiff or withheld from a deserving plaintiff."⁸¹ As a generalization, and assuming that we equally value errors against each side, one can show that the preponderance rule – as opposed to proportional liability – minimizes the costs of errors of allocating the award between the two parties.

The idea of minimizing the allocation of errors is not self-evident.⁸² To the extent one deems it an important factor, how does stepwise liability fare in this respect? As a hybrid rule, stepwise liability's costs of error lie between the two familiar rules.⁸³ To see this, observe that cases whose evidentiary strength crosses the 50% threshold should end in a complete win for the plaintiff under both stepwise liability and the preponderance rule (but in a partial award under the proportional rule). This result reduces error costs under stepwise liability relative to the proportional rule in this group of cases.⁸⁴ By contrast, cases whose evidentiary strength is below the 50% line should end in a partial award under

 $^{^{79}}$ It should be noted, though, that while the incentives to invest in litigation overall seem lower under stepwise liability, the incentives to invest in the adjudication of the intermediate steps seem larger. This, "frontloading" of litigation efforts may occur as the intermediate steps have more weight under the proposed regime – and particularly with respect to the sunk steps regime, where the intermediate steps could guarantee a certain amount to the plaintiff.

⁸⁰ *Cf.*, Spottswood, supra note 7, at $\frac{*26-27}{}$ (discussing spoliation and concluding that a continuous rule is likely to reduce incentives to spoliate).

⁸¹ Spottswood, *supra* note 8, at $\frac{*12}{}$.

⁸² Indeed, the preponderance rule minimizes the erroneous allocation of remedies but it is does not serve "efficiency or distributive considerations." Pelled, *supra* note 4, at *31.

 $^{^{83}}$ Cf., the proposal to a hybrid logistic continuous rule, which, in terms of costs of error, also lies between the familiar rules. Spottswood, *supra* note 8, at *31-34. Along these lines, to the extent the disappearing steps version is closer to the preponderance rule, *e.g.*, as optimistic plaintiffs tend to proceed to trial, its error costs are accordingly lower than the sunk steps version.

⁸⁴ Take a case in which the damages are 100 and the evidence suggests that the plaintiff wins with probability 70%. Under stepwise liability (and the preponderance rule) the plaintiff always wins – but in 30% of the cases the plaintiff should not have won, or, error costs are 30%*100=30. Under the proportional rule, the plaintiff receives 70 in this setup. In 70% of the cases the plaintiff should have won the entire damages, 100, rather than 70 (error costs of 21=70%*30); but in 30% of the cases the plaintiff should have won nothing rather than 70 (error costs of 21=30%*70). The sum of error costs under the proportional rule is 42, higher than the stepwise liability regime.

both the proportional rule and stepwise liability (but in a zero award under the preponderance rule).⁸⁵ This result increases costs of error under stepwise liability relative to the preponderance rule.

3. Process Accuracy

The foregoing discussed costs of allocating errors under a given decision-rule. A different issue is the accuracy of the implementation of each decision-rule. Alternatively put, the previous subsection asked what is the erroneous allocation of remedies, *given* that the evidentiary strength is x%. The following discusses whether we can trust the evidentiary strength x% that we observe.

Stepwise liability leads to less accurate decision-making precisely because it grants weight to intermediate procedural steps. As more evidence is proffered throughout the life of a case, the final outcome should be, by and large, more accurate than the outcome in earlier stages. Accuracy, in turn, has social value.⁸⁶

To demonstrate this argument, take a case in which the plaintiff has survived a motion to dismiss. In the current regime, the plaintiff is entitled, at this step, to nothing. Under stepwise liability, by the mere virtue of surviving a motion to dismiss the plaintiff is entitled to part of the damages. Suppose that later, after additional evidence is presented, it turns out that the plaintiff should not have survived dismissal. In essence, the plaintiff was mistakenly entitled to a partial award (had the additional evidence been presented earlier).

Although stepwise liability entails a less accurate process, there are various mitigating factors. First, the problematic situations are those in which the assessment of the plaintiff's case materially changes throughout the case; however, the extent to which these situations are common is unclear. Moreover, even if the plaintiff has mistakenly survived a motion to dismiss, as in the example above, she might still be entitled to something under the proportional rule (e.g., ~10% of the damages) had the case proceeded to trial. Second, under the disappearing steps version the problem seems less pressing – as plaintiffs who believe they have good cases move forward and then lose. Third, under the current regime plaintiffs typically settle in initial stages – and these settlements may well reflect mutual mistakes

⁸⁵ Think of a case with damages 100 and evidentiary strength of 25%. Under the preponderance rule the plaintiff wins nothing. Under the proportional rule the plaintiff wins 25. Suppose that under stepwise liability the plaintiff in such a case survives a motion to dismiss and hence wins 30% of the damages, or, 30. We can verify that error costs under the preponderance rule are the lowest, 25 (25% *100). Under the proportional rule error costs are 37.5=75%*25+25%*75. Under stepwise liability error costs are 40=75%*30+25%*70.

⁸⁶ See, e.g., Louis Kaplow, *The Value of Accuracy in Adjudication: An Economic Analysis*, 23 J. LEGAL STUD. 307 (1994). Notably, accuracy improves deterrence – "false negative[] [errors] mean[] that those who commit harmful acts are less likely to be sanctioned, while false positives increase expected sanctions for innocent behavior. Both effects reduce the disincentive to commit harmful acts." *Id.*, at 310.

regarding the value of the case. Finally, loss of accuracy can be compensated by other means. A broader right to appeal throughout the case – interlocutory appeals – can improve judicial decision-making.

4. Equality

The proposed regime benefits plaintiffs, but it particularly helps poorer ones - to both file a case and go to trial (or, to credibly threaten to go to trial). These effects should also manifest themselves in the amount that poorer plaintiffs can extract through settlements.

First, unlike proportional liability and the preponderance rule, stepwise liability allows plaintiffs at the least the choice to drop the case and cash in after surviving each step. Moving forward to trial, even for relatively good claims, is costly. Hence, this choice – whether to quickly drop with a partial award or proceed to trial – should particularly benefit plaintiffs who face financial constraints and promote equality among plaintiffs.⁸⁷ Second, the capacity to drop and cash-in also reduces the overall risk from adjudication – as the plaintiff can expect, sometimes, an intermediate rather than all-or-nothing outcome. This again benefits the most the poorest plaintiffs, who are apparently the most risk-averse. These two effects, the capacity to enjoy a quick payment and the reduced risk from adjudication, are stronger for the sunk steps option, which can guarantee a certain amount regardless of the result at trial.

* * *

The idea that this Article presents, granting liability as a proportion of the damages, according to the procedural stage the plaintiff survived, has notable pros and cons. On the one hand, stepwise liability offers partial compensation to those who are not able to meet the proverbial preponderance of the evidence standard. This feature is likely to raise deterrence, particularly for the group of wrongs that consistently suffer from weak evidentiary power. In addition, the link between stepwise liability and the current procedural design guarantees that it could be implemented with minimal changes to the existing framework – in essence, policymakers only need to set a price for the current standards. Moreover, the ability to achieve quick resolution with partial compensation, that is, to "cash-in" after passing the first steps, promotes equality among plaintiffs.

On the other hand, stepwise liability also presents some conspicuous pitfalls. The mirror image of quick (though partial) compensation in weak cases is concerns for over-deterrence, a flood of petty cases, larger legal expenses, and inaccurate decision-making.

⁸⁷ While one can argue that litigation funders can help poor litigants to go to trial (in exchange for part of the prospective award), reality suggests that the litigation funding market is imperfect. *Cf.*, Ronen Avraham & Abraham Wickelgren, *Third-Party Litigation Funding-A Signaling Model*, 63 DEPAUL L. REV. 233 (2014) (discussing the flaws of the market and observing the benefits of admitting third-party funding agreements).

Are the advantages greater than the disadvantages? To further push the idea of stepwise liability I would like to offer several general directions for thought.

First, the balance between the advantages and disadvantages is, at the end, situation-dependent. To illustrate, as I elaborate in subsection 0, stepwise liability indeed generates greater deterrence relative to the preponderance rule. In case the preponderance rule under-deters, stepwise liability can achieve an optimal result (or at least move us in the desired direction). In case the preponderance rule over-deters, stepwise liability aggravates the problem.

Second, given the disadvantages of stepwise liability, one can think of an array mitigating steps. To illustrate, over-deterrence concerns could be mitigated by setting a lower price for passing each step.⁸⁸ Concerns for a flood of petty cases could be answered by demanding a higher bar for surviving the first steps.⁸⁹ Along these lines, courts could also be more aggressive in sanctioning abusive litigation.⁹⁰ Accuracy concerns could be addressed by a broader right to interlocutory appeals. Finally, the disappearing steps version seems more palatable in these respects. It is less favorable to plaintiffs, raises fewer concerns regarding over-deterrence, and, more generally, closer to the preponderance rule. It also avoids uncomfortable situations in which a plaintiff receives partial compensation though she loses on later stages.⁹¹

Against this backdrop, the most fruitful direction, in my view, is limiting the stepwise liability proposal to confined enclaves. This, in essence, is the way proportional liability is currently implemented – only in some, relatively narrow instances.⁹² What are, then, the most important contexts to use the stepwise liability regime? Areas that suffer from consistent under-enforcement, particularly due to pervasive evidentiary problems, seem appropriate for the stepwise liability proposal (as well as the proportional rule). In addition to remedying chronic evidentiary problems, stepwise liability allows quick, partial compensation and thus can be particularly suitable where victims endure financial constraints. Finally, stepwise liability suits cases in which damages are easy to calculate – e.g., statutory damages claims.

⁸⁸ See supra text accompanying note 55.

⁸⁹ *Cf.*, the higher standard required to survive a motion to dismiss after Bell Atl. Corp. v. Twombly, 550 U.S. 544 (2007).

⁹⁰ E.g., through FED. R. CIV. PRO. 11.

⁹¹ A related point is the capacity of judges to sidestep stepwise liability in various ways. Judges, for instance, may counter the proposed regime by requiring a higher threshold to pass the initial phases. While the discussion of this point is beyond the scope of this Article, it seems that the disappearing steps option is more palatable to judges, for the reasons in the text, and hence less likely to be circumvented.

⁹² E.g., through the use of the lost chance or the market share liability doctrines. RESTATEMENT (THIRD) OF THE LAW OF TORTS: LIAB. FOR PHYSICAL AND EMOTIONAL HARM, § 26, 28 (AM. LAW. INST. 2010). For a short discussion *see also* Pelled, *supra* note 4, at *23.

Practically, the presiding judge could decide, on a case-by-case basis, whether to mandate stepwise liability (somewhat similarly to the current use of the proportional rule). Alternatively, policymakers could define, in advance, the relevant areas for the implementation of stepwise liability. As stepwise liability fits the case of financially-constrained victims, one can think of "fast-track" courts in specific areas, à-la small-claims courts, in which victims would receive quick compensation according to their procedural progression.⁹³

CONCLUSION

This Article proposes a thought-experiment. Instead of an all-or-nothing or a continuous rule, the law can utilize a middle ground – assigning liability stepwise, according to the procedural progression of the case. The stepwise liability proposal has several notable benefits. It enhances deterrence, as it allows for partial compensation, like the proportional rule, for cases that are not sufficiently strong to win under the preponderance rule. Unlike the proportional rule, stepwise liability is embedded in the current design of civil procedure, and thus better fits the existing legal framework. Moreover, it allows for quick compensation for plaintiffs who manage to move through the initial procedural hurdles. The proposal has, of course, drawbacks. It attracts more cases into the legal system, and is expected to increase legal expenses. It might also create over-deterrence. I suggest, then, that the proposal should be implemented in specific contexts, where a procedure that provides partial, quick compensation seems the most desirable one.

I conclude this Article by noting that the idea that a plaintiff should receive quick compensation through a simple process reflects the original spirit of the Federal Rules of Civil Procedure. The drafters of the original, 1938 civil procedure rules envisioned a single-step process – trial on the merits. However, the increasing burden of cases pushed courts to erect more demanding pre-trial phases, which hinder plaintiffs from proceeding with weak merits.⁹⁴ The era of a thorough trial on the merits in all cases – the day-in-court ideal – is gone. However, stepwise liability restores some of the spirit of the original rules, as the plaintiff can receive at least partial compensation through simple (and perhaps

⁹³ A possible example for such a fast-track may be medical malpractice cases. First, there seems to be chronic under-deterrence in this context, which is tied to plaintiffs' inferior information. *Supra* note 58 and accompanying text and *supra* note 36. Second, victims of medical malpractice seem to suffer from financial constraints.

⁹⁴ Particularly, in 1986 the Supreme Court guided courts, in a series of cases, to rely more heavily on summary judgments. For s short discussion of the 1986 precedents and their impact see, e.g., Arthur R. Miller, *Simplified Pleading, Meaningful Days in Court, and Trials on the Merits: Reflections on the Deformation of Federal Procedure*, 88 N.Y.U. L. REV. 286, 310 (2013). In two cases from 2007 and 2009, the Court required a higher standard from plaintiffs in order to survive motions to dismiss, thus encouraging defendants to file these motions. Bell Atl. Corp. v. Twombly, 550 U.S. 544 (2007); Ashcroft v. Iqbal, 556 U.S. 662 (2009).

even single-phased) proceedings. Alternatively put, while the original rules envisioned a single step, and courts have added more steps on the way to trial, stepwise liability restores some of the monetary meaning of the very first steps.

APPENDIX

A. Numerical Examples of Ex-Ante Liability under Different Regimes

The following table provides several numerical examples of liability under each rule in various instances, assuming that damages are 100. The "price" for each step and the number of steps correspond to the example in subsection **Error! Reference source not found.**, that is, the evidentiary standard to s urvive a motion to dismiss (summary judgment) is 20% (35%), and the "price" is identical to the threshold. Hence, a plaintiff who survives a motion to dismiss (summary judgment) is entitled to 20% (35%) of the damages.

Each column presents a different liability regime. The first two are the optimal, proportional rule and the traditional, preponderance rule. The third is stepwise liability, under the sunk steps version. The last is stepwise liability under the disappearing steps option, and given an assumption of an optimistic plaintiff, who always proceeds. I marked over-deterrence in red and under-deterrence in blue (recall that the proportional rule expresses optimal deterrence).

	Situation	Proportional	Preponderance	Stepwise	Stepwise liability
		rule	rule	liability	(disappearing steps) +
				(sunk steps)	optimistic plaintiff
1	60% always	60	100	100	100
2	Half 80%; half 40%	60	50	67.5	50
3	Half 80%; half 20%	50	50	60	50
4	Half 50%; half 30%	40	50	60	50
5	Half 40%; half 20%	30	0	27.5	0
6	25% always	25	0	20	0

Table 1: Comparing the Ex-Ante Incentives to Take Care under Different Regimes

Each row presents a different situation. The first expresses chronic over-deterrence (under the preponderance rule), e.g., the defendant's is liable at the level of 60%.

The second reflects liability at the level of 40% half of the time and 80% at the other half (that is, optimal liability is 0.6*100=60). The preponderance rule creates under-deterrence, as it gives the entire pie to the plaintiff half of the time but nothing otherwise, such that the plaintiff expects 50. The optimistic plaintiff under the disappearing steps version reaches an identical result, as the plaintiff loses everything at trial half of the time. Stepwise liability (sunk steps) generates over-deterrence, namely, expected liability of 100*0.5+35*0.5=67.5: half of the time the plaintiff wins and receives 100, and in the other half she receives 35 (after passing the summary judgment threshold).

The third row expresses liability at the level of 80% half of the time and 20% otherwise (optimal liability is thus 50). The preponderance and the stepwise liability/optimistic plaintiff option yield an expected liability of 50. The sunk steps version yields over-deterrence, and an expected value of 60=0.5*100+0.5*20.

The fourth row presents the case of liability at the level of 50% half of the time and 30% otherwise, such that optimal liability is 40. The preponderance rule (and the optimistic plaintiff under disappearing steps) present over-deterrence as half of the time the plaintiff gets the entire pie. Sunk steps aggravates the over-deterrence, as the plaintiff gets the entire pie half of the time and 20 in the other half (0.5*100+0.5*20=60).

The fifth row, where liability is assumed to be 40% half of the time and 20% otherwise (30 is optimal liability), presents an opposite story. The preponderance and the optimistic plaintiff/disappearing steps generate zero liability and considerable under-deterrence. The sunk steps version improves matters as half of the time the plaintiff receives 35 and 20 in the other half - 0.5*35+0.5*20=27.5.

The final row presents situations of 25% liability (always) – hence, an optimal expected liability of 25. Somewhat similarly to the previous row, this generates chronic under-deterrence under the preponderance rule (and the optimistic plaintiff under disappearing steps) – the plaintiff expects zero. The sunk steps regime brings expected liability to 20, closer to the optimal level.

B. Expected Liability under Different Distributions

The following table utilizes the same baseline example to provide the expected liability under various distributions, under different regimes: proportional liability, the preponderance rule, and stepwise liability (the sunk steps version). Again I marked over-deterrence in red and under-deterrence in blue (recall again that the proportional rule expresses optimal deterrence). All distributions correspond to the range zero to one (or, 100%) liability.

Tuble 2. Comparing Expected Enterint J under Effetent Regimes and Distributions							
	Distribution	Proportional rule	Preponderance rule	Stepwise liability			
1	Uniform	50	50	58			
2	Triangular with mode 0.5	50	50	61			
3	Triangular with mode 0.25	42	34	47			
4	Triangular with mode 0.75	58	66	74			

Table 2: Comparing Expected Liability under Different Regimes and Distributions

The first row represents a uniform distribution of the states of the world, in terms of evidentiary strength against the defendant, from zero to 100%. It is easy to see that under the proportional rule the expected liability of the defendant is simply 50 (it is the mean value of damages given the distribution); this is also the optimal ex-ante result, as the defendant exactly pays (on average, and in expected value) the harm it inflicted. The preponderance rule also gives the optimal result, 50 – in half of the states of the world the plaintiff receives 100 and in the other half she gets nothing. By contrast, under our stepwise liability example (sunk steps) the defendant expects to pay more - ~58. To see this observe

that under the uniform distribution assumption, in 20% of the cases the plaintiff fails to pass a motion to dismiss and hence the defendant pays nothing. In 15% of the cases the plaintiff only passes a motion to dismiss, resulting in damages of 20; and in 15% of the cases the plaintiff manages to survive a summary judgment but fails at trial, generating damages of 35. Finally, in half of the cases the plaintiff wins and receives full award. Hence, 0.2*0+0.15*20+0.15*35+0.5*100 ~ 58.

The second row presents the case of a triangular distribution of the ex-ante states of the world with mode 50% – that is, an unbiased distribution where there are relatively more cases around the middle point. Again it is easy to see that, by the nature of the symmetric distribution, the preponderance and the proportional rule result in expected liability of 50 (optimal), whereas one can verify that stepwise liability (the sunk steps version) again creates over-deterrence, or, expected liability of ~61.95 Overdeterrence is higher than the uniform distribution example as there are more cases around the 50% point.96

The third row presents a triangular distribution with a mode 25%, that is, a distribution that is biased to the left (more factually thin cases). The proportional rule again generates expected liability which equals the mean of the triangular distribution, $\sim 42 = (0+25+100)/3$. Under the preponderance rule the expected liability is lower, 34 – under-deterrence stems from the fact that there are relatively more cases below 50%.97 One can show that stepwise liability (sunk steps) again results in over-deterrence, or, expected liability of ~47.

Finally, I examined the case of a biased, triangular distribution with a mode of 75% (more strong cases). The proportional rule generates optimal, expected liability of ~58. The preponderance rule overdeters (expected liability of 66) – more cases cross the 50% threshold and enjoy full liability. Stepwise liability aggravates the over-deterrence problem, leading to expected liability of ~74.

C. The Preponderance Rule versus Stepwise Liability – Varying Prices for Each Step

The foregoing assumed that the price for passing each step equals to its evidentiary requirement. However, the award under stepwise liability can be separated from the evidentiary threshold. In this subsection I briefly compare stepwise liability (sunk steps) and the preponderance rule.

⁹⁵ More generally, if the probability density function is f(p) over the support [0,1], the expected liability under the sunk steps regime in our numerical example is $\int_{0}^{0.2} f(p)0 + \int_{0.2}^{0.35} f(p)20 + \int_{0.3}^{0.5} f(p)35 + \int_{0.5}^{1} f(p)100$. ⁹⁶ Observe that a half 49%, half 51% situation results in an expected liability of (100+35)/2=67.5 under the sunk

steps regime, whereas the proportional and the preponderance rules give the optimal result, 50.

⁹⁷ Similarly to supra note 95, the more formal and general expression for the expected liability under the preponderance rule is $\int_{0}^{0.5} f(p)0 + \int_{0.5}^{1} f(p)100$, or, in our case, 0.66*0+0.34*100.

Let f(p) be a probability density function of different states of the world over the support [0,1] with cumulative distribution F(p). Denote the damages D. Without loss of generality, let x,y be the evidentiary requirements for the two pre-trial steps under the proposed regime, 0 < x < y < 0.5. Let 0 < a < b < 1 the price, as a fraction of the damages D, for passing x and y respectively.

Observe, then, the expected liability under the preponderance rule and stepwise liability:

$$\pi_{Prep.} = \int_{0.50}^{1} f(p)D.$$

$$\pi_{SW} = \int_{x}^{y} f(p)aD + \int_{y}^{0.5} f(p)bD + \int_{0.50}^{1} f(p)D$$

Proposition 1

Expected liability under stepwise liability can be reduced by lowering the price for each step, but expected liability under the preponderance rule is its lower limit.

Proof.

- By reducing *x*, *y*, π_{SW} becomes weakly smaller.

- Observe that $\pi_{SW} - \pi_{Prep.} = \int_x^y f(p) aD + \int_y^{0.5} f(p) bD$, which is greater than or equal to zero as a, b > 0.

Discussion. Stepwise liability generates greater expected liability than the preponderance rule, as all the cases below 50% gain partial compensation thereunder. However, by changing the price expected liability could be reduced.

Illustration. We showed in Table 2 that for a uniform distribution expected liability under the preponderance rule is 50 and under stepwise liability (sunk steps) is ~58. By leaving the evidentiary threshold intact (20%, 35% to survive a summary judgment and summary judgment), but reducing the price for surviving a motion to dismiss (summary judgment) to 10% (20%) of the damages expected liability decreases to 54.5.

Corollary 1

Suppose that, for a given a, b stepwise liability creates over-deterrence, where the preponderance rule creates under-deterrence. In that case, stepwise liability could achieve an optimal result by reducing a and b.

Proof.

- Recall that the optimal expected liability is the mean of the distribution times the damages. Denote the mean M.

- By the given under-deterrence, $\pi_{Prep.} < MD$. Observe that in that case F(0.5) > 0.

- Hence, and given Proposition 1, by changing a,b, π_{SW} could be reduced, and $\pi_{Prep.}$ is its lower limit. Then, π_{SW} could be reduced by $\pi_{SW} - MD$, which brings π_{SW} to an optimum.

Discussion. Where stepwise liability over-deters and the preponderance rule under-deters we can always reduce the "prices" a and b and achieve the optimal result.

Illustration. We showed in Table 2 that for a triangular distribution with a mode 0.25 the optimal expected liability is 42, whereas the preponderance rule generates under-deterrence (liability of 34) and stepwise liability crates over-deterrence (liability of 47). These numbers rely on the assumption that a=x and b=y, that is, the evidentiary threshold equals the price. Suppose that the price for surviving a

motion to dismiss (summary judgment) is 10% (23%) whereas the evidentiary threshold remains the same. In that case one can verify that the expected liability under stepwise liability reduces to ~42, the optimal level.

D. The Effect of Stepwise Liability on Settlements

Divergent Expectations. Suppose that a plaintiff brings a lawsuit against a defendant for damages W. While the amount in controversy W is well-known the parties differ with respect to their expectations at trial: the plaintiff expects that she wins with probability p_P while the defendant expects the plaintiff to win with probability p_D (note that $p_P > p_D$ means that the parties are optimistic relative to each other). If the parties do not settle, the case is litigated under the American rule, that is, each side bears her own costs, with legal expenses of c_P and c_D to the plaintiff and the defendant, respectively.

The parties can agree on a settlement if the gain for the plaintiff from litigating (net of legal expenses) is lower or equal to the costs of the defendant (inclusive of legal expenses), or, if:

$$Wp_P - c_P \le Wp_D + c_D.$$

Arranging sides and denoting the expectation gap $\Delta p = p_P - p_D$ and $C = c_P + c_D$ one can see that the parties have a mutually agreed range to settle if

$$\Delta p \leq \frac{c}{w}$$

This analysis holds at any point in time. Hence, if, after the first step the ratio $\frac{c}{w}$ is smaller the parties are less likely to settle (holding constant their expectation gap Δp).

Asymmetric Information. There are various ways to analyze settlements under asymmetric information. For simplicity, the following analyzes a two-type model.⁹⁸ Suppose that there are two types of defendants, weak and strong, with expected liability J_H and J_L , where $J_H > J_L$. Suppose that the damages W are known but the two defendant types differ with respect to the likelihood p of being found liable at trial, respectively, $p_H W = J_H$ and $p_L W = J_L$.

Their type is the defendants' private information, whereas the plaintiff only knows the distribution of the two types in the population. Suppose that the legal expenses of each side, regardless of type, are c_D and c_P , where $C = c_P + c_D$. Suppose also that defendants make a single take-it-or-leave-it offer to the plaintiff. This setup results in a fully-revealing equilibrium. Weak types offer $J_H - c_P$ and settle with certainty. Strong types offer $J_L - c_P$, though the plaintiff should reject some of these offers to

⁹⁸ For an example of a two-type model along these lines see Lavie & Tabbach, *supra* note 36.

prevent mimicking by weak defendants. The probability q with which low settlement offers $J_L - c_P$ are settled can be derived by the weak type's indifference equation:⁹⁹

$$J_H - c_P = q(J_L - c_P) + (1 - q)(J_H + c_D).$$

Observe that the left-hand side expresses the costs of weak types from revealing, and the right-hand side reflects the costs of mimicking, that is, settling with probability q and going to trial with the complementary probability. Denote $\Delta J = J_H - J_L$. One can verify that the acceptance rate of low offers is thus:

$$q = \frac{c}{c + \Delta J}$$

Observe that q rises with the legal costs C but decreases with the judgment, as ΔJ rises with W.

To see the effect of settling at each step on the rate of acceptance q let $d = \frac{c}{\Delta J} = \frac{c}{W(p_H - p_L)}$, and suppose that $p_H - p_L$ remains constant throughout trial. In that case $q = \frac{d\Delta J}{d\Delta J + \Delta J} = \Delta J \frac{d}{d+1}$. Note that, as trial proceeds, $\Delta J = W(p_H - p_L)$ decreases (*W* decreases) as well as *C*. Hence, if the ratio *d* remains the same, *q* is lower; if the ratio *d* reduces, *q* is likewise lower. The acceptance rate *q* can be higher only when *d* increases (that is, the remaining legal expenses, *C* decrease throughout the process at a lower pace than the remaining judgment, *W*).

⁹⁹ Id., at 19-22.