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## **New Empirical Tests for Classic Litigation Selection Models**

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## New Empirical Tests for Classic Litigation Selection Models

Yun-chien Chang & William Hubbard<sup>†</sup>

### Abstract

Law and economics theorists have long advanced theories of litigation and settlement, including the canonical Landes-Posner-Gould (LPG) and Priest and Klein (PK) models. Famously, PK predict that, as settlement rates rise, plaintiff win rates approach 50%. Empiricists have tested this and other predictions from the theoretical literature, finding qualified support for the PK model. So far, though, empirical testing of these models has been hampered by two major limitations: First, these models make clear predictions about the effect of case stakes on settlement rates and plaintiff win rates, but lack of reliable data on stakes means these predictions have gone untested. Second, most of the studies have used data from the U.S., a high-settlement, high-litigation-costs setting, and the generalizability of these models to other institutional settings has been less explored. In this paper, we use a novel dataset of Taiwanese court data to test previously untested predictions of the LPG and PK models and explore the extent to which these models apply to a low-settlement, low-litigation-cost setting. We find strong support for the predictions of the LPG model that we test. We find at best weak support for the 50% hypothesis of the PK model, consistent with recent research suggesting that the hypothesis will have limited applicability in a low-settlement, low-litigation-cost environment.

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Keywords

Priest-Klein model, Landes-Posner-Gould model, 50 percent hypothesis, divergent expectations, risk aversion, stakes, settlement rate

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## I. Introduction

What drives parties to a dispute into litigation, and what leads them to settlement, have long been studied in the economic analysis of law. The original canonical model of suit and settlement comes from the synthesis of seminal papers by Landes (1971), Posner (1973), and Gould (1973). The Landes-Posner-Gould (or “LPG”) model in turn is the foundation for Priest and Klein (1984) (“PK”) model. The PK model generates the best-known empirical prediction in the literature in suit and settlement: as the settlement rate rises, plaintiffs’ win rate at trial converges to 50%.

A long-standing empirical literature has sought to test this prediction and has (mostly) lent qualified support to this prediction of the PK model. Yet despite the prominence and influence of these canonical models, some of their clearest empirical predictions remain untested. In other words, for all the attention paid to the 50% hypothesis, the rest of the empirical content of the LPG and PK models has been relatively neglected, despite the fact that the LPG and PK models generate numerous empirical predictions.<sup>1</sup> These predictions include two very straightforward claims:

- As stakes rise, settlement rates fall (LPG and PK).
- As stakes rise, plaintiff win rates fall (LPG).

Yet existing studies have not tested these predictions. The problem is that these predictions involve stakes, and most administrative data on litigation lacks consistently coded and reliable (or any) data on stakes. Studies that are unable to use reliable, direct measures of stakes due to the limitations of their data include Ramseyer and Nakazato (1989), Eisenberg (1990), Eisenberg (1991), Waldfogel (1995; 1998), Siegelman and Donohue (1995), Siegelman and Waldfogel (1999), Klerman (2012) and Cui and Wang (2017). Thus, given the limitations of their data, these studies did not consider hypotheses about the relationship between the amount at stake and settlement or plaintiff win rates.

In this paper, we utilize a new dataset with unusually complete and reliable data on case stakes. This allows us not only to test the famous 50% hypothesis but also to test predictions of the LPG and PK models noted above. These two predictions have not previously been amenable to precise empirical testing due to lack of data on

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<sup>1</sup> For example, Lee and Klerman (2016: 60) enumerate six concrete hypotheses originating from Priest and Klein (1984).

stakes. Our data is administrative data from the courts of Taiwan that includes detailed information on the universe of civil cases terminated from 2010 to 2015. In addition to information on the court, the parties, filing and disposition dates, case category, appeals, etc. that are also found in high-quality U.S. data, our dataset includes a precise measure of stakes for every case, including cases that are settled or withdrawn after filing. Further, the rules governing the pleading of stakes in Taiwan ensure that the amount claimed by plaintiffs is not “cheap talk”—the filing fee is directly proportional to the stakes claimed, and thus plaintiffs have incentive to neither overclaim (the filing fee goes up) nor underclaim (the amount claimed is a limit on the plaintiff’s eventual recovery). Using this data, we generate the first rigorous tests of two key empirical predictions of the LPG and PK models.

Further, our Taiwanese data allow us to test the LPG and PK models, including their 50% hypothesis, in an institutional context different from the U.S. This allows us to assess the generality of these models, in particular by testing them in an institutional setting where settlement is not the norm as it is in the U.S. While settlement rates in most categories of U.S. cases run well above 50%, settlement rates in most categories of cases in Taiwan are below 30%. In this way, we conduct a very different test of the 50% hypothesis than previous studies. Previous studies looked at data from high-settlement-rate systems. But recent research by Klerman and Lee (2014) suggests that the PK hypothesis, which strictly speaking describes only the limiting case as settlement rates approach 100%, has little or no relevance in settings with low settlement rates. Finding strong support for the PK hypothesis in the Taiwanese setting, therefore, would provide surprising support for the generalizability of the hypothesis beyond the limiting case; finding weak or no support for the PK hypothesis in the Taiwanese setting, on the other hand, would be consistent with the Klerman and Lee (2014) interpretation of the PK model. Moreover, as Chang and Klerman (2019)’s calculation of the civil settlement rates in the world’s top 25 economies show, high-settlement-rate systems are rare. U.S., U.K., and Australia are the only three countries with higher than 50% settlement rates, and several countries have lower than 10% settlement rates. If PK hypothesis does not hold in the Taiwan setting, it is unlikely to hold in many countries in the world that has similar settlement rates. This empirical study thus informs whether the PK hypothesis is widely or narrowly applicable.

By testing a broader range of empirical predictions of the LPG and PK models, and by examining whether they usefully describe an institutional context different from the contexts in which these models have previously been tested, we can assess

the quality of these models as descriptive and predictive of real-world litigation and settlement. (To be clear, our goal is not to causally identify, in a reduced-form way, the relationship between attributes of litigation and settlement or trial outcomes. Rather, the models that we are testing make claims about the causes of litigation and settlement. We test these models.) To the extent that a model's predictions are supported by the data, we can be more confident that the model may be a useful guide in prescriptive analysis. And if its predictions are rejected, more caution is warranted.

Thus, testing these canonical models is valuable, because these models shape how we evaluate the legal system (both positively and normatively). The PK model, for example, predicts that even when changes in legal standards favor plaintiffs, the selection of cases into settlement and trial means that we cannot detect the change by looking for a rise in plaintiffs' rate of winning at trial. (Instead, more cases that plaintiffs would win may settle instead.) If this insight is correct, then we cannot—as lawyers and commentators often do—infer from rising win rates for defendants that the law is shifting in favor of defendants. But if we find a lack of support for the 50% hypothesis, at least in a low-settlement setting, stronger inferences may be justified (see Klerman and Lee 2014).

Validating or rejecting these models is also important to the extent that these models imply prescriptions for legal reforms. For example, let's say that we want to encourage settlement, in order to reduce the expenses associated with litigation, and allow parties to obtain relief faster. The LPG and PK are based on “divergent expectations” between the parties to a dispute, and settlement failure is the product mutually optimism on the part of the parties. If these models are correct, then appropriate policy prescriptions might include identifying sources of optimism bias in clients and lawyers, and designing legal procedures to incorporate de-biasing techniques, informed by psychology and behavioral economics. To some extent, the U.S. legal system may do this already—legal representation is commonplace in U.S. courts, and a growing body of evidence shows that a person acting on behalf of another (i.e., an attorney) is less prone to cognitive bias than a person acting on their own behalf (i.e., the client) (see, e.g., Arlen and Tontrup 2015). Alternatively, or in addition, reducing sources of mutual uncertainty would reduce the range in which biases could affect behavior. A tort system with highly predictable, rather than discretionary, judgments about liability and damages might accomplish this (see,

e.g., Ramseyer 2015: 10–70).<sup>2</sup>

In sum, this paper contributes to the literature testing the empirical predictions of two canonical theoretical models of suit and settlement. We take advantage of a dataset of civil cases from Taiwan that is more comprehensive in its coverage of cases than most available datasets and that provides detailed and consistent measurement of stakes, a quantity that is particularly hard to find in extant datasets. The Taiwanese legal system also provides a novel opportunity to test the predictions of the PK model in a setting with low settlement rates. We test two previously neglected empirical predictions of the PK and LPG models—that settlement rates fall as stakes rise and that plaintiff win rates fall as stakes rise—and we also test the 50% hypothesis of PK. We find strong support for the predictions of the LPG and PK models that settlement rates fall as stakes rise and for the prediction of the LPG model that plaintiff win rates fall as stakes rise. We find only weak and inconclusive support for the 50% prediction of the PK model. This latter finding is consistent with the view that the 50% prediction does not apply in settings beyond the limiting case of settlement rates close to 100%.

In Part II, we provide a brief overview of the relevant features of the Taiwanese legal system. Part III reviews the canonical models and sets forth the key empirical predictions that we test, giving particular attention to how the Taiwanese institutional setting affects, and we believe enriches, the interpretation of our results. Part IV describes the pertinent data. Part V presents our results. Part VI concludes.

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<sup>2</sup> This paper does not attempt to test other canonical models, such as Bebchuk (1984) and Spier (1992), which assume that settlement failure is the product of asymmetric information between the parties. These models merit study as well, and to the extent they describe reality, they generate their own distinct policy prescriptions, such as to facilitate settlement by eliminating information asymmetry (which is the policy that the U.S. federal courts have followed since the implementation of the Federal Rules of Civil Procedure in 1938). Because our data do not contain better measures of asymmetric information than previous studies, we focus on the divergent expectations models. Further, recent work by Gelbach (2018) shows that the Priest and Klein (1984), Bebchuk (1984), Shavell (1996), and other important models of litigation and settlement can be represented by a single, common, “reduced form” theoretical framework that is consistent with the basic postulates of the PK model. This complicates any effort to discriminate empirically between the PK model and other models of litigation and settlement.

## II. Background on Taiwanese Courts and Civil Litigation

Taiwan is a civil-law country. Most of its private laws resemble those in Germany with influences from Japanese laws (Wang 2002; Huang 2009: 251; Chang 2016: 227–228; Chang, Chen, and Wu 2017; Chang, Garoupa, and Wells 2019). American laws have only occasionally been referenced in legal reforms. As is typical for a civil-law system, there is no sharp distinction between pre-trial and trial phases litigation; the entire lawsuit could be considered the “trial.” In this respect, the simple dichotomy between “trial” and “settlement” in models like LPG and PK is a closer fit to Taiwan than even the U.S. itself, given that U.S. litigation involves many stages (such as pleading and summary judgment) distinct from trial or settlement.

The public trial is not intensive. Rather, judges and attorneys meet once every few weeks. There is no American-style discovery in Taiwan, although there are rules for disclosure of information early in the process. Settlement, like in U.S. practice, can occur in many ways. Parties can settle out of court after filing a lawsuit. The fact that the parties reached a settlement may be shared with the court, which then will usually approve the settlement and end the litigation on that ground. But if the parties settle and they prefer to keep the settlement terms strictly confidential, plaintiffs can simply withdraw their cases, which likewise leads to termination of the action. Judges, too, are encouraged by the Taiwan Code of Civil Procedure to actively promote settlement. There is also mediation, which can involve separate mediators or judges administering the mediation themselves.

Settlement rates in Taiwan are low, less than 30%. This contrasts with the United States, where settlement rates are much higher, above 65% in federal court. The high settlement rates in the U.S. provide a favorable setting to study the PK prediction that the plaintiff win rate will approach 50% *in the limit as settlement rates approach 100%*. But does the tendency toward 50% hold even when settlement rates are lower? Taiwan permits us to test whether the predicted tendency for win rates to converge toward 50% as settlement rate rise holds even in a setting where settlement rates are much lower, far from the limiting case.

Taiwan has a unitary legal system, unlike the United States’ federal system. In addition to a constitutional court in charge of abstract, centralized, ex post constitutional review, there are administrative courts that deal with disputes between citizens and governments regarding public-law matters; ordinary courts that handle civil and criminal cases; and IP courts. Our data regard civil law



disputes (excluding those related to family and inheritance issues, but including commercial issues) rendered by courts of first instance within the ordinary courts, where there are 22 district courts. (When the administrative data were provided to us, these 22 courts were grouped into seven court regions.)

The fact that Taiwan has a unitary court system means that our study contains cases spanning the full range of civil litigation, from minor, local controversies to large-scale litigation affecting national or even international interests. In contrast, studies involving U.S. data can look only at slices of U.S. litigation—most available data is from federal courts, but federal civil litigation amounts to only about 2% of all civil litigation in the United States, and studies looking at state court data (including the original Priest and Klein (1984) study itself) rely on small subsamples of the universe of state court cases (data on which is largely inaccessible to researchers).<sup>3</sup> Our data permits us to test these models using data from courts handling the full spectrum of legal disputes.

Further, even if state court data were available, civil litigation in the U.S. is not representative of civil litigation elsewhere,<sup>4</sup> and thus results from the U.S. do not necessarily apply in other systems. For example, contingency fees for lawyers are popular in the U.S. but less common, even prohibited, in other jurisdictions, and the combination of broad discovery, jury trials in civil cases, and common law judging is unique to the U.S. Testing these models in other contexts therefore speaks to the general validity of these models.

There are three types of court procedures: small-claim procedure, summary procedure, and ordinary procedure. Small-claim procedures apply when the amount at stake is below 100,000 NTD (approximately 3,300 USD). Small-claim cases are handled by a single judge in one of the 22 district courts. The median time between filing and termination for cases ended in adjudication is 50 days. This kind of case can be appealed to a three-judge district court panel on questions of law.

Summary procedures apply when the amount at stake is below 500,000 NTD (approximately 16,000 USD) or in certain types of cases (which are specified in Article 427 of Taiwan Code of Civil Procedure; these include, for example, land boundary disputes, recovery of possession, and short-term labor contracts). This type

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<sup>3</sup> Most of the prior studies testing the LPG and PK models have involved the U.S. court context. Exceptions are Cui and Wang (2017), Ramseyer and Nakazato (1989), and Klerman (2012).

<sup>4</sup> According to Chang and Klerman (2019), settlement rates in the U.S. are exceptionally high among the world's top 25 economies.

of cases is also handled by a single judge. The median time between filing and termination for cases ended in adjudication is 58 days. Cases can be appealed to a three-judge district court panel for trial de novo, and the court may permit further appeal to Supreme Court.<sup>5</sup>

A case applying ordinary procedures is handled by a single judge in the district court. The median time between filing and termination for cases ended in adjudication is 166 days.<sup>6</sup> Appeals are handled by a three-judge panel in one of the six high courts. The review of facts and laws is de novo. Cases with more than 1,000,000 NTD (approximately 33,000 USD) at stake may be appealed to the Taiwan Supreme Court for questions of law. Within each procedure type, court procedures and schedules are uniform across cases.

In Taiwanese courts the filing fee is pro rata (about 1% of the amount claimed in the first instance), meaning the higher the stakes, the more expensive (in absolute terms) it is to use litigation to resolve the dispute.<sup>7</sup> Because the filing fee depends on the stakes of the case, the declared stakes of every case are recorded, regardless of whether the case settles or goes to judgment.

These facts make our data uniquely valuable for studying the LPG and PK models. Because the filing fee is about 1% of declared stakes, it is costly for plaintiffs to exaggerate stakes. In this way, the stakes recorded in the administrative data are a more credible measure of the stakes as judged by the plaintiff; they are not “cheap talk” by the plaintiff. In contrast, U.S. court data rarely has reliable information on stakes, and no prior work testing the LPG and PK models has the luxury of using such fine-grained data on stakes.<sup>8</sup> Thus, our data is unusually rich in its

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<sup>5</sup> The Taiwan Supreme Court only reviews questions of law; our data do not include its decisions. For empirical studies of case selection by the Taiwan Supreme Court, see Eisenberg and Huang (2012).

<sup>6</sup> As a point of comparison, in the U.S. federal courts, civil cases on average last approximately 326 days (median duration is 230). Authors’ calculations for all U.S. district courts, civil cases filed 1999–2004 (data on file with authors).

<sup>7</sup> Filing fees are two-thirds refunded if parties settle (including through mediation) in court before adjudication. Filing fees have to be paid in full by plaintiffs before any court procedure starts. If plaintiff wins partially, filing fees are allocated on pro rata basis between the parties. If plaintiffs win entirely, filing fees are the sole responsibility of defendants. Nonetheless, filing fees are not refunded to plaintiffs by the court. Rather, a plaintiff enforces the award of filing fees against the defendant.

<sup>8</sup> Most states do not require the complaint to specify a damages amount (although plaintiffs often do), and the federal courts require only an allegation that stakes exceed USD 75,000 in cases based on diversity jurisdiction, which make up about one quarter of the federal civil docket. Thus, cases with damages specified in the complaint are a selected subsample of all cases. Further, because filing fees do not depend on the amount claimed in federal court (and

comprehensive and credible measure of case stakes, even for settled cases.<sup>9</sup>

Most attorneys charge flat fees, collected beforehand. Contingent fees are legal but are used in less than 5% of the cases (Chang and Tu 2019 forthcoming). Bigger law firms charge by the hour about half of the time (Chang and Tu 2019 forthcoming). Surveys to attorneys show that the amount of flat attorney fees vary, based on the complexity of facts and the amount at stake, among other factors.<sup>10</sup> That said, most attorneys charge 1,500 USD to 2,500 USD per case, per court instance (Hsu, Chiang, and Chang 2019), and rarely did attorneys charge more than 3,400 USD per case, per court instance. Most parties do not hire lawyers at all. In our data, less than one-third of parties were represented by separate counsel. Large corporations, however, often are represented by in-house counsel, which does not appear in our data.

All told, the high rates of *pro se* litigation, use of in-house counsel by corporations, and flat-fee billing combine to make the costs of litigation relatively inelastic to the stakes of any given case. Likewise, the filing fee is proportional to stakes, but rises more slowly than stakes. While higher-stakes cases will surely cost more to litigate than lower-stakes cases, the correspondence between cost and stakes is not one-to-one. The relatively constant cost of litigating within each court procedure has useful implications for our study. For unrepresented parties, within each court procedure (more on this below), stakes vary substantially relative to litigation costs, which remain relatively constant. Even for represented parties, especially in ordinary procedures, the stakes can be sky high but market competition sets a ceiling on how much an attorney charges. Hence, stakes can still rise while

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in many state courts), incentives to accurately quantify stakes tend to be weaker for U.S. cases. For comparison of U.S. federal court cases and Taiwanese cases, see Chang and Hubbard (2020).

<sup>9</sup> Further features of the Taiwanese data are advantageous as well. Chang and Hubbard (2020) find that debt repayment and money collection cases in both Taiwanese courts and U.S. federal courts share the same trait of low settlement rates and high plaintiff win rates. If these cases are included in regression models, these outlier categories may drive the correlations we find in the data, leading to exaggerated confidence in the robustness of the LPG and PK models. In the Taiwanese data, we can identify these types of cases and exclude them from the primary empirical analysis. Further, the Taiwan data chronicle whether plaintiffs fully win or partially win. The PK model and most of the literature have operated under the dichotomy of wins and losses. The Taiwan data enable us to explore whether considering plaintiffs' partial win as not a full win will alter the empirical results. In this way, we can test for the robustness of our results along more dimensions that previous studies have been able to do.

<sup>10</sup> Original research; data on file with authors.

attorney fees and the fixed cost of litigating in court remain stable. As a result, each procedure provides an excellent setting for studying the relationship between stakes (relative to costs), on the one hand, and settlement rates and plaintiff win rates, on the other hand. Most datasets lack data on stakes or litigation costs, and most institutional settings do not involve relatively constant litigation costs. Thus, few settings provide opportunities to study the questions we study here.

Notably, the cost of litigation (even for unrepresented parties) will rise discontinuously as one moves from small-claim, to summary, and then ordinary procedure. Each type of procedure involves distinctly different commitments in terms of hearing time, legal research, and evidence. In the summary and small-claim procedures, plaintiffs are allowed to make oral claims. Essentially, plaintiffs can externalize the costs of formulating their claims formally to the court; therefore, they do not need to hire attorneys. By contrast, for plaintiffs in the ordinary procedure, written claims are required. In addition, in the summary and small-claim procedures, in principle, parties will meet only once for trials. If one party fails to show up, judges have discretion to issue default judgments. By contrast, in the ordinary procedure, there is no limit on trial days, and the use of default judgments is more constrained. These differences again ensure that the summary and small-claim procedures are less costly than the ordinary procedure for parties. Furthermore, the small-claim procedure is even less costly than the summary procedure, because in the former, plaintiffs may use a tabular form to make their claims; trials may be conducted in the evening or in weekends; and under certain circumstances, judges may skip evidence investigation and act more like arbitrators.

The fact that litigation costs jump as one moves between (but not within) procedures types has implications for our hypothesis testing. We expect that, within a procedure type, rising stakes implies that a rising ratio of stakes to costs, but across procedure types, this may or may not be true.

### **III. Theory and Hypotheses**

In this section, we identify a set of three hypotheses that we draw from the literature on litigation and settlement and specifically from the LPG and PK frameworks. We focus on empirical predictions that are testable in our data. By testing these predictions, we will shed light on the validity and generality of the LPG and PK models, including extensions to the PK model that introduces risk aversion.

## A. Landes–Posner–Gould

What drives parties to a dispute into litigation, and what leads them to settlement, have long been studied in the economic analysis of law. Canonical models were first developed in the 1970s. The synthesis of these papers is often referred to as the Landes (1971)–Posner (1973)–Gould (1973) (or LPG) model. This model treats parties as wealth-maximizing actors whose decisions maximize their perceived net payoffs in litigation.

In this framework, there is a known amount in dispute, and if the parties have the same expectation of the probability that the plaintiff wins at trial, settlement is inevitable. Because litigation is costly for both parties, there is a range of settlement amounts that both parties would prefer to trial. For this reason, the LPG framework rationalizes trial—i.e., failure to settle—as the product of “divergent expectations” about the plaintiff’s likelihood of winning. If each party is optimistic about their chances, the plaintiff will tend to demand more, and the defendant will tend to offer less, in settlement. If the stakes are high enough, or the cost of going to trial is low enough, divergent expectations about the parties’ odds at trial may make settlement impossible. To be more precise, as stakes rise relative to the cost of litigating, small differences in the parties’ beliefs about their likelihood of winning are more likely to render the defendant’s settlement willingness to pay less than the plaintiff’s willingness to accept. Thus, in this framework, settlement becomes less likely as stakes rise relative to litigation costs or as mutual optimism diminishes.

The LPG model have been developed, extended, and criticized over more than three decades. Its prediction that settlement rates fall as stakes rise relative to costs has been challenged in theoretical grounds. Cooter and Rubinfeld (1989: 1077) and Kessler, Meites, and Miller (1996: 246) argue that risk aversion can reverse the relationship between stakes and settlement rates, because risk-averse parties will face increasing variance in outcomes, and thus increasing risk, as stakes rise. Thus, they will increasingly tend to settle rather than litigate when stakes are high.<sup>11</sup> This more recent view does not reject the LPG wholesale, but rather hypothesizes that risk aversion will outweigh the effect of mutual optimism on the relationship

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<sup>11</sup> Landes (1971: 99), in the criminal law context, points out that the greater the defendant’s aversion to risk, the more likely that a settlement is to take place. Huang (2016: 385) uses data from face-to-face surveys in Taiwan to study out-of-court settlement behaviors, and finds that the amount of claim (X-axis) and estimated settlement probability (Y-axis) have an inverted U-shape relationship. That is, settlement rates are highest when the stakes are medium, neither high nor low.

between stakes and settlement.

The baseline predictions from LPG and the refinements incorporating risk aversion yield a pair of competing empirical predictions. The canonical LPG divergent expectations model predicts that higher stakes make trial more likely.<sup>12</sup> To the contrary is the view that risk-averse parties will tend to settle at higher rates when stakes are high. Thus, we state our first hypothesis in the alternative:

**H1(a): Holding litigation costs constant, higher stakes will be associated with lower settlement rates. In our data, this means that, at least within procedure type, higher stakes will be associated with lower settlement rates.**

**H1(b): Holding litigation costs constant, higher stakes will be associated with higher settlement rates. In our data, this means that, at least within procedure type, higher stakes will be associated with higher settlement rates.**

We note that it is possible that both effects will be empirically relevant, and for some levels of stakes, one effect may dominate the other.<sup>13</sup>

We also consider a second, subtler potential empirical prediction of the LPG framework. The logic of the LPG model leads one to predict a negative relationship between stakes and win rates in first-instance cases.<sup>14</sup> Here is why: in the LPG model, a plaintiff files suit only if the expected value of the suit (stakes times probability of winning) exceeds the cost of litigation. For low-stakes cases, this will likely be the case only when likelihood of winning is high. For high-stakes cases,

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<sup>12</sup> Note that the canonical models do not distinguish between pre-filing and post-filing settlements. From the theoretical perspective, both are voluntary agreements to avoid judicial adjudications. Our data, as in almost all data regarding litigation and settlements, can observe at most post-filing settlements. If certain types of disputes systematically end in pre-filing settlements more often, this could become a problem in terms of supporting or rejecting models. In Lin et al. (2016: 107–108), the "dispute pyramids" from face-to-face interviews with more than 5000 Taiwanese in 2011 show that in the eight major types of civil disputes, except "land/house" dispute (18%), in only 1.7%–7.6% of civil disputes where one party has "contacted" the other party regarding the matter ultimately entered courts. In other words, the percentages of out-of-court settlements (including giving up) are very high, and all about in the same ballpark.

<sup>13</sup> We also note that these hypotheses may be consistent with other models of litigation and settlement not tested here. For example, H1(a) predicts that higher stakes will be associated with lower settlement rates, consistent with the one-sided asymmetric information screening model in Bebchuk (1984).

<sup>14</sup> We thank Dan Klerman for suggesting this line of inquiry.

expected value may exceed cost even if the plaintiff's chances of winning are low.

This gives us our second hypothesis:

**H2: In our data, at least within procedure type, plaintiff win rates will fall as stakes rise.**

## B. Priest and Klein

Building on the LPG model, Priest and Klein (1984) describe a model that generates a number of dramatic predictions about litigation. They posit that, if parties have expectations about their chances at trial that are unbiased and fairly accurate, mutual optimism will lead to settlement failure only in relatively “close” cases—cases where the plaintiff's probability of winning is close to 50%. More concretely, plaintiff trial win rates converge toward 50% as the settlement rate rises. (We will refer to this as the “50% hypothesis.”) This is the most famous of the PK predictions and the one to which the empirical literature has devoted the most attention. Note that this is *not* a causal claim—PK do not claim that one case settling causes any other case (one that doesn't settle) to become more of a toss-up! Rather, the argument is that an underlying selection process endogenously generates the relationship, within a category of cases, between the fraction of cases that settle and the plaintiff win rate among those that don't. Because “close” (i.e., 50/50) cases are the hardest to settle, only the close cases go to trial when settlement rates are high.

To test this prediction, we follow Waldfogel's (1995; 1998) conceptual approach and hypothesize that when comparing courts and case types, those categories with higher settlement rates will have plaintiff win rates closer to 50%. This gives us our third hypothesis.

**H3: In our data, when divided by court and nature of suit type, categories of cases with higher settlement rates will have plaintiff win rates closer to 50%.**

The institutional setting in this study informs our interpretation of this hypothesis. As noted above, settlement rates are much lower in our data than in the U.S. context. Although PK predict that plaintiff win rates will approach 50% as settlement rates rise, the claim that they will converge to 50% only applies in the limit as settlement rates approach 100%. And as Klerman and Lee (2014: Table 1)

discuss, even when settlement rates are high, convergence to 50% is not perfect.<sup>15</sup> Thus, there are reasons *a priori* to be skeptical that one will find a robust tendency toward a 50% win rate as settlement rates rise in a court system where the overall rate of settlement is low. In the setting of our study, therefore, results strongly supporting H3 would strongly endorse the 50% hypothesis, while weak or null results would be more consistent with the view that the 50% hypothesis applies only close to the limiting case, along the lines suggested by Klerman and Lee (2014).

The most important challenge for any model of human behavior, of course, is to generate empirical predictions that survive the rigorous testing of such predictions. As we noted at the outset, the LPG and PK models have attracted their share of attention from empirical scholars, but this attention has focused on the 50% hypothesis. The literature has generated mixed results in terms of how closely litigation outcomes fit the 50% hypotheses (Ramseyer and Nakazato 1989; Eisenberg 1990; Stanley and Coursey 1990; Eisenberg 1991; Siegelman and Donohue 1995; Waldfogel 1995; 1998; Klerman 2012; Cui and Wang 2017). Importantly, while we contribute to this literature by testing the 50% hypothesis (our H3, above), we go beyond the existing literature by testing the stakes-related predictions of the LPG/PK framework (our H1 and H2, above).

#### IV. Data and Summary Statistics

Our data are administrative data on the Taiwan courts collected by the Judicial Yuan of Taiwan and made available to us for research purposes. (The Judicial Yuan of Taiwan is the administrative organ for judicial matters.)

The original dataset includes 718,079 first-instance cases, each of which appears as a single observation in the data. For our analyses below, we excluded cases/observations in which the central or a local government is a party, remanded cases, cases coded as disputes arising after defective settlement or mediation agreements, and cases in which the number of plaintiffs or defendants was erroneously coded as 0. We also exclude cases in which the parties did not litigate over a monetarily quantifiable claim. We then trimmed observations in the first and

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<sup>15</sup> They report simulation results of the predicted plaintiff win rates and the strength of the tendency toward 50% when litigation conditions lead to settlement rates between 80% and 99%.



last percentiles of stakes, to minimize undue effects from extreme outliers,<sup>16</sup> and we removed cases with more than one party in either side (for which patterns of settlements and verdicts may be complex and poorly documented in the data). And because the plaintiff win rate is one of the key outcome variables, we omitted cases in which defendants counter-claimed. In Appendix A, we report regression models that include cases with counter claims and those with multiple parties. In the main analysis reported in the text, we also exclude the “debt collection cases” (more on this below). This left 185,859 cases in our data that we used for the main analysis below.

The data contain information on case outcomes (Table 1), separating the outcomes of “plaintiff win” (plaintiff obtains all requested relief) and “partial win” (plaintiff obtains relief but less than the total amount claimed). In our regression analysis, we follow the prior literature and treat both of these categories as victories for the plaintiff. Thus, we recode “partial win” as “plaintiff win.”<sup>17</sup> In Appendix B, we treat a partial win as “half a win,” based on the notion that a partial win may reflect the type of close case that the PK hypothesis would predict goes to trial.<sup>18</sup> All results, except where specifically noted below, are the same in terms of sign and statistical significance.

Table 1 provides summary statistics for key variables for our analysis. (Table D.1 provides summary statistics for additional variables in the data.) As noted above, a valuable contribution of this data is its information on stakes claimed. The mean stakes of about NTD 1,213,060 is equivalent to approximately USD 40,000; the

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<sup>16</sup> We note that the distribution of stakes in each major case type is generally smooth, except perhaps in tort damages cases and damages cases. See Figure D.5. This supports the inference that claimed stakes corresponds to the underlying distribution of alleged harms, rather than being primarily driven by arbitrary thresholds or round numbers.

<sup>17</sup> In the prior literature, an outcomes is usually coded as a plaintiff win if plaintiff received any benefit at trial (Kessler, Meites, and Miller 1996: 243; Eisenberg and Farber 1997: S100), and most prior articles, except Klerman (2012) and Huang (2009), did not distinguish between plaintiff partial wins and plaintiff full wins. The Japanese administrative data used in Ramseyer and Nakazato (1989: 283) and the American administrative data used in other articles do not distinguish between full and partial wins by the plaintiffs.

<sup>18</sup> Note that a partial win can arise in two ways. The first way is that the plaintiff could prevail on one claim and lose on a second claim. For purposes of testing the PK model, this could be coded as “0.5,” because the plaintiff is winning 50% of the time. But the second, and we suspect more prevalent way that a partial win arises is when the plaintiff prevails but receives less than the full amount demanded. For example, if a plaintiff claims for, say, 100 dollars as damages, then the Judicial Yuan of Taiwan defines as a partial win any court award between 1 cent and 99.99 dollars. Only 100 dollars is a full win, and only a 0 dollar award is a full loss.

median of about NTD 250,000 is equivalent to about USD 8,300.

We also see from Table 1 that most plaintiffs, but a minority of defendants, are corporations. This reflects the fact that many lawsuits involve debt collection efforts by corporations against individuals.

Also notable is the relative rarity of settlement in Taiwan. We see settlements in less than a quarter of all cases.<sup>19</sup> This is far less than in the U.S., where settlement rates in federal court tend to exceed 60% (Hadfield 2004; Eisenberg and Lanvers 2009: 143). In this paper, we treat several outcome categories in the data as “settlement”: these include judge-approved settlement, judge-administered successful mediation, and plaintiff withdrawal. We treat successful mediation and judge-approved settlement as “settlement” in the relevant sense (i.e., in contrast to a judicial judgment in which the court renders a verdict that declares a winner). In Appendix C, we exclude plaintiff withdrawal from our definition of settlement, to account for the possibility that withdrawals are driven by considerations distinct from other settlements.<sup>20</sup> All results are quantitatively and qualitatively similar.

Judgment outcomes after trial in Taiwan also differ from the corresponding patterns in the U.S. Plaintiffs in Taiwan (like those in Japan, see Ramseyer and Nakazato (1989)) win more than 50% of the time at trial. This is in contrast to the U.S., where various empirical articles have found that, at least for many categories of cases, plaintiffs win less than 50% at trial (Kessler, Meites, and Miller 1996: 236).

## V. Results

In this section, we present our results. Our results appear more-or-less plainly in graphical representations of the “raw” data, and we find identical patterns in our regression results, which test for the predicted correlations with various controls. To preview, we find a clear negative relationship between stakes and settlement rates, supporting H1(a) (LPG) and rejecting H1(b) (risk aversion), and a clear negative

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<sup>19</sup> The high trial rates and low settlement rates were about at the same levels in 1996–2006 (Huang 2009: 262–263).

<sup>20</sup> As an empirical matter, most cases coded as ending in “withdrawals” involve private settlements. Although our data do not specify the reasons for any given withdrawal, a recent survey of attorneys in Taiwan conducted by one of us finds that most withdrawals are the result of settlements, with the median attorney responding that 80 percent of all withdrawals are due to settlement between the parties (2018 National Attorney Survey in Taiwan). Other studies using Taiwanese data also code cases ending in plaintiff withdrawal as “settled.” See Huang (2009: 256–257).

relationship between stakes and plaintiff win rates, supporting H2 (LPG). We find a weak tendency for plaintiff win rates to tend towards 50% as settlement rates rise, which we treat as inconclusive with respect to H3 (PK).

For each of the hypotheses tested in this paper, we employ the same regression models and controls. We run linear probability models (OLS), and all regressions include controls for party type (indicators for corporate plaintiff and for corporate defendant) and a standard set of fixed effects: 3 types of proceedings (small-claim, summary, and ordinary), 12 case types, 7 court regions, and 18 years of case filing (1998–2015). We also run separate regressions for cases of each type of proceeding (small-claim, summary, and ordinary) and separate regressions including only cases with high stakes, which we define as stakes in excess of USD 75,000, as such cases are arguably comparable to U.S. federal-court cases, which tend to involve far higher stakes than the typical case in Taiwan (or in U.S. state court).<sup>21</sup> This makes our results for Taiwanese courts somewhat more comparable to results based on studies of U.S. federal court data.

Specifications reported herein exclude loan contract and debt payment cases (hereinafter “debt collection cases”). Debt collection cases represent a disproportionate share of all cases, and we have *a priori* reasons to doubt that prevailing theories of suit and settlement apply to them: most of these actions involve efforts to collect on unpaid debts (most often, unpaid credit card debts) in which there is little or no dispute about the existence of the debt or the amount due—and thus, little or no opportunity for models relying on “divergent expectations” about the outcome of the suit to explain the observed patterns of trial and settlement. Further, unlike other types of litigation, which tends to involve individual plaintiffs, debt collection cases overwhelmingly involve corporate plaintiffs suing individual defendants.<sup>22</sup> Finally, based on statistics from the Judicial Yuan on “money borrowing” cases, a category that corresponds to what we have labeled “debt collection” cases, roughly 70% of money borrowing cases end with default judgments, whereas only about 17% of other types of cases ended this way.<sup>23</sup>

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<sup>21</sup> This dollar amount corresponds to the amount-in-controversy requirement for diversity jurisdiction cases in U.S. federal court. See 28 U.S.C. § 1332(a). We use an exchange rate of 30 NTD to 1 USD, which is (to within 1 NTD), current as of May 10, 2019.

<sup>22</sup> In our data, 86% of the debt collection cases involve corporate plaintiffs suing natural-person defendants, while only 22% of other cases do.

<sup>23</sup> We acquired the default judgment statistics from the Statistics Department of the Judicial Yuan. Both we and the Department use the same raw data to combine cases into dispute types. We are confident that money borrowing cases as identified by the Department highly

Of the money borrowing cases, fully 95% of them were decided 100% in favor of the plaintiff. For these reasons, we consider our results excluding debt collection cases to be our preferred specifications for regressions.

Nonetheless, as prior empirical studies do not exclude any particular type of civil litigation, in Appendix G, we report results with debt collection cases included. Results for H1 and H2 are quantitatively and qualitatively similar. Results for H3 are stronger when debt collection cases are included. Because in debt collection cases settlement rates are extremely low and plaintiff win rates are extremely high, the inclusion of debt collection cases has the mechanical effect of generating a negative correlation between settlement rates and distance of the plaintiff win rate from 50%. But as noted above, we do not see debt collection cases as the type of cases for which “divergent expectations” is a good explanation for settlement failure.<sup>24</sup> Thus, we do not place weight on these results.

***Hypothesis 1.*** Our first hypothesis is that as stakes rise, settlement rates fall. We begin with Figure 1, which bins cases by their stakes, and then shows the average settlement rate for each bin. As Figure 1 makes remarkably clear, within each proceeding type (small, summary, and ordinary procedure), settlement rates fall as stakes rise.<sup>25</sup> Recall that the LPG model predicts that settlement rates fall as stakes rise, holding litigation costs constant. Stakes in Figure 1 rise steadily as one moves left-to-right, while, within each proceeding type, costs remain roughly constant (see Section 2), but costs rise discretely as one moves from small to summary, or summary to ordinary, proceedings. What we see is exactly what the LPG model predicts (H1(a)): holding costs constant, higher stakes are associated with lower settlement rates.

Table 2 presents a series of regressions that test H1. We use linear probability models (i.e., OLS) with robust standard errors clustered by court regions. The left-hand-side variable is an indicator for settlement. The key right-hand-side variable is stakes (log transformed).

Our results here support the basic LPG prediction (Hypothesis 1(a)), but not the prediction that risk aversion will lead to higher settlement rates as stakes rise (Hypothesis 1(b)). Consistent with what Figure 1 shows, the relationship between

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overlapped with the debt collection cases defined by us.

<sup>24</sup> In other work, we examine debt collection cases further and develop explanations. See Chang and Hubbard (2020); Hubbard (2019).

<sup>25</sup> Unreported graphs show that the same pattern (settlement rates decreasing within proceedings) holds in all 7 court regions.

stakes and settlement is negative. In most specifications, especially among higher-stakes cases, the negative relationship is statistically significant (at the 1% level) and consistent<sup>26</sup> in magnitude.<sup>27</sup> Thus, we consider H1(a) supported by the regression results. Conversely, we do not find support for Hypothesis 1(b) in the data.

This result is strongly consistent with the basic logic of the LPG and PK frameworks: as stakes rise relative to the costs of litigation, disagreements about the merits of the plaintiff's claim become more consequential, making it harder for parties to find an acceptable settlement amount consistent with their beliefs about what will happen at trial.

**Hypothesis 2.** Next, we test the hypothesis that, holding all else equal, as stakes rise, plaintiff win rates fall. We begin with Figure 2, which bins cases by their stakes, and then shows the average plaintiff win rate for each bin. As Figure 2 makes remarkably clear, plaintiff win rates consistently fall as stakes rise.

Table 3 presents a series of regressions that test H2. We use linear probability models (i.e., OLS) with robust standard errors clustered by court regions. The left-hand-side variable is an indicator for plaintiff win. The key right-hand-side variable is stakes (log transformed).

Our results here support the LPG prediction (Hypothesis 2) that Figure 2 so dramatically illustrates. The relationship between stakes and plaintiff win rates is consistently negative and, in most specifications, statistically significant. Thus, we consider H2 supported by the regression results.

This result is strongly consistent with the foundational premise of the LPG framework: a plaintiff will file suit if the expected value of her claim is positive. For any given level of stakes, only plaintiffs with sufficiently high expectations of winning will file suit. As stakes rise (and litigation costs stay constant), a lower likelihood of winning will be sufficient to make the expected value of suit positive. So long as the selection of suits into settlement is not too strong—and in our data, settlement rates are low—this means that as stakes rise, plaintiff win rates will fall.

**Hypothesis 3.** We now test the 50% hypothesis of the PK model. We begin with a

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<sup>26</sup> See the robustness checks in Table A1, Table B1, and Table F1.

<sup>27</sup> Because risk aversion may affect individuals more so than corporations, we re-run these results including only cases between individuals. See Table F1. Our results hold even for this subset of the data. In our robustness check including counterclaim cases and multiple party cases, the results are even more consistently negative and statistically significant. See Table A1.

graphical test. To do this, we divide our data into groups. Many grouping are possible; for consistency, we create groups using the categories that served as controls throughout the paper.<sup>28</sup> We divide all our cases into bins based on court procedure (three procedures), court (7 regions), and case category (12 subject-matter categories). This yields 504 bins (some of which may be empty in the data), each of which contains all cases with a unique combination of procedure, court, and case type. Within each bin, we computed the settlement rates and plaintiff win rates. Settlement rates are the number of settlements divided by the number of filed cases that were either settled or decided by judges. Plaintiff win rates are the number of plaintiff wins divided by the number of court decisions (i.e., non-settlements). In Figure 3, we plot settlement rates against plaintiff win rates, with each group of cases as a single data point. Each circle represents one bin, with the size of the circle proportional to the number of court decisions in the bin.

We hypothesized (H3) that plaintiff win rates will approach 50% as settlement rates rise. In Figure 3, however, no obvious pattern appears.<sup>29</sup> We interpret this as a lack of compelling graphical evidence in favor of H3.

Regression analysis is consistent with this qualitative conclusion. Table 4 reports results of regressions where each observation corresponds to a bin defined by the same set of controls used for other regressions: procedure, level, court, case type, and filing year. The outcome variable for the regression is the distance between the plaintiff win rate and 50% (i.e., it is the absolute difference between the plaintiff win rate for that observation and 0.50). The PK hypothesis predicts that as settlement rates rise, this distance will fall, and thus we predict a negative relationship between settlement rates and the outcome variable. In Table 4, we see that across all cases, this negative relationship holds and is statistically significant. When we look at the data by procedure type or look specifically at high stakes cases, however, this relationship disappears. Rather, the sign and magnitude of the coefficients bounce around and most are not statistically significant. We interpret these results as inconclusive. There is some weak support for H3, but we consider the result a

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<sup>28</sup> In Figure 3, we group cases by court procedure, court region, and case category (all of which correspond to the fixed effects we include in our regressions), but for graphical clarity, we do not also group by filing year (which we do include as fixed effects in our regressions). This would multiply the number of possible categories by a factor of 18, making most individual observations impossible to distinguish in a scatterplot. Grouping by filing year yields a very similar (but more cluttered) figure.

<sup>29</sup> One might perceive a slight trend from upper-left to lower-right, which is consistent with H3, but it is hardly compelling visual evidence!

null. In the low-settlement context of Taiwan, at least, we do not find support for Priest and Klein's famous prediction.

**Summary.** We see support for the prediction of the LPG model (whose logic underlies the PK model) that higher stakes will be associated with lower settlement rates (H1(a)) and with lower plaintiff win rates (H2). Both of these results are strongly consistent with the basic logic of the LPG framework: as stakes rise relative to the costs of litigation, plaintiffs are more willing to bring weaker claims, and disagreements about the merits of the plaintiff's claim become more consequential, making it harder for parties to find a mutually acceptable settlement amount consistent with their beliefs about what will happen at trial. Priest and Klein's famous 50% prediction (H3), however, has only weak support in our data. We see this as suggestive evidence that even if the 50% prediction is true in the limit, it has limited empirical relevance when settlement rates are low, consistent with the predictions made by Klerman and Lee (2014).

## VI. Conclusion

Using a new, comprehensive dataset of civil cases from Taiwan, we tested three hypotheses reflecting the predictions of the LPG and PK models. We find support for the LPG model, but find little support for the applicability of the PK model in a low-settlement context. These results should reinforce the canonical status and broad use of the LPG model in studies of litigation. And they may help refine our understanding of the PK model and its limits.

These results are especially timely, as the theoretical literature on litigation and settlement, after years of focusing on models of asymmetric information, is experiencing something of a "renaissance" for the PK model (see, e.g., Klerman and Lee 2014; Gelbach 2018; Klerman, Lee, and Liu 2018), the LPG model upon which it is based, and for symmetric information models more generally (see, e.g., Hubbard 2016).

To be sure, these results are not conclusive, and they represent only a test of a few implications of the LPG and PK models in the context of one legal system. Nonetheless, our study is the first to employ detailed, reliable measures of stakes for data from an entire court system to test central predictions of these canonical models that previous studies have not been able to test due to the limits inherent in the data available to those studies. Further, we are able to shed light on the extent to which the 50% hypothesis of the PK model, which has been extensively tested in

the high-settlement context of U.S. litigation, applies in a litigation environment with lower overall settlement rates.

More generally, we believe these results contribute to the growing literature that seeks to identify the empirical implications of influential theories and then test those predictions against data. And we believe that empirical tests of theories of litigation versus settlement with non-U.S. data may, in situations such as ours, provide different and better tests of the predictions of theories developed in the context of the U.S. legal system.



## Tables

TABLE 1. SUMMARY STATISTICS

Variable	Mean	Median	Max	Min
Stakes (000s NTD)	1213	250	33900	6.6
Year Filed	2012	2013	2015	1998
Corporate Plaintiff	0.34	--	1	0
Corporate Defendant	0.22	--	1	0
Outcomes				
Settled	0.34	--	1	0
Plaintiff Win	0.29	--	1	0
Plaintiff Partial Win	0.22	--	1	0
Plaintiff Loss	0.14	--	1	0
Court Procedure				
Small Claim	0.31	--	1	0
Summary Procedure	0.36	--	1	0
Ordinary Procedure	0.32	--	1	0

**Note.** N=185,859, which are the total observations used in the regression reported in column (1) of Table 2. Outcomes (including “procedural dismissal”, “transfer jurisdiction”, and some other procedural management) not reflecting settlement or a judgment on the merits are excluded from the N in this table. Debt collection cases are excluded.

TABLE 2. PREDICTORS OF SETTLEMENT RATE

	(1)	(2)	(3)	(4)	(5)
	All cases	High stake	Ordinary	Summary	Small claim
Ln Stakes	-0.016*** (0.003)	-0.021*** (0.003)	-0.020*** (0.001)	-0.014+ (0.006)	-0.029** (0.005)
Corporate Plaintiff	-0.018 (0.010)	0.015 (0.009)	0.055*** (0.006)	-0.020 (0.017)	-0.056** (0.015)
Corporate Defendant	0.003 (0.005)	-0.003 (0.008)	-0.014 (0.010)	-0.009 (0.012)	-0.002 (0.007)
N	185859	23217	60375	67071	58413
Adjusted $R^2$	0.010	0.013	0.016	0.010	0.026

**Note.** Robust standard errors (in parentheses) clustered on court region. Dependent variable is binary (settlement, successful mediation, or withdrawal=1; otherwise=0). +  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ . The signs and significance levels for stakes do not change if the two corporation dummies are removed from the regressions. High stakes cases are cases with stakes exceeding USD 75,000. All columns include fixed effects for procedure, case type, court region, and filing year. Debt collection cases are excluded. Linear regressions including cases with one plaintiff against one defendant. Only first-instance cases are included. Full table with coefficients for all fixed effects appears in Appendix E. To address potential concerns about having only seven clusters, we ran the *cgmwildboot* command developed by Mitchell Petersen, Douglas Miller, and Judson Caskey for Stata that implemented Cameron, Gelbach, and Miller (2008)'s wild bootstrapping procedure for bootstrapping standard errors. After running 1000 successful resamples, the p-values in (1) – (5) are reported as 0.002, 0.002, 0.002, 0.116, and 0.002, respectively. Table F1 reports the same model with two-way clusters of courts and filing years. The results are qualitatively the same.

TABLE 3. PREDICTORS OF PLAINTIFF WIN RATES

	(1)	(2)	(3)	(4)	(5)
	All cases	High stake	Ordinary	Summary	Small claim
Ln Stakes	-0.013*** (0.002)	-0.009 (0.009)	-0.021*** (0.003)	0.005+ (0.002)	-0.032*** (0.003)
Corporate Plaintiff	0.095*** (0.010)	0.070** (0.013)	0.044* (0.013)	0.109*** (0.012)	0.106*** (0.011)
Corporate Defendant	-0.054*** (0.005)	-0.043** (0.009)	-0.055* (0.022)	-0.021*** (0.003)	-0.102*** (0.004)
N	121928	15464	38883	44248	38797
Adjusted $R^2$	0.067	0.036	0.030	0.033	0.065

**Note.** High stakes cases are cases with stakes exceeding USD 75,000. Linear regressions including cases with one plaintiff against one defendant. Settled cases excluded. All columns include fixed effects for court region, procedure, case type, and filing year. Debt collection cases are excluded. Robust standard errors (in parenthesis) clustered on court region. Full table with coefficients for all fixed appears in Appendix E. +  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ . To address potential concerns about having only seven clusters, we ran the *cgmwildboot* command developed by Mitchell Petersen, Douglas Miller, and Judson Caskey for Stata that implemented Cameron, Gelbach, and Miller (2008)'s wild bootstrapping procedure for bootstrapping standard errors. After running 1000 successful resamples, the p-values in (1) – (5) are reported as 0.002, 0.166, 0.002, 0.108, and 0.002, respectively. Table F2 reports the same model with two-way clusters of courts and filing years. The results are qualitatively the same.

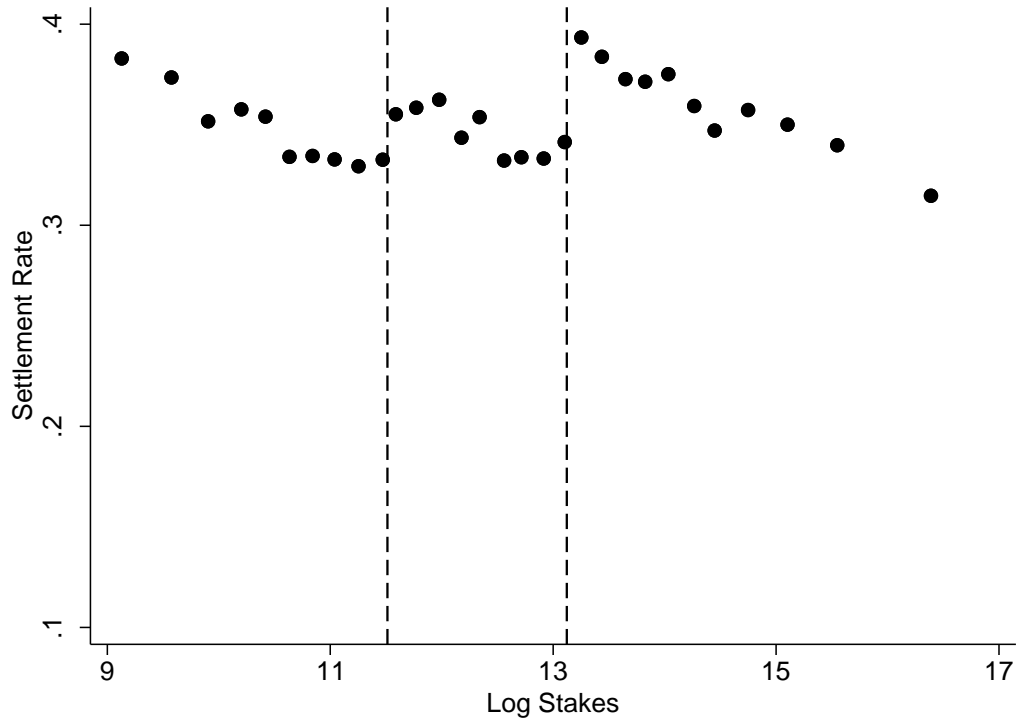
TABLE 4. RELATIONSHIP BETWEEN SETTLEMENT RATES AND ABSOLUTE DEVIATION OF PLAINTIFF WIN RATES FROM 50%

	(1)	(2)	(3)	(4)	(5)
	All cases	High stake	Ordinary	Summary	Small claim
(mean) settlement	-0.150* (0.061)	0.092 (0.090)	0.001 (0.093)	0.037 (0.058)	-0.245* (0.082)
N	1297	586	528	444	325
Adjusted $R^2$	0.697	0.490	0.553	0.568	0.542

**Note.** Robust standard errors, clustered by court region, in parentheses. Outcome variable is the absolute value of the difference between the plaintiff win rate and 0.5. Each observation includes the average settlement rate and the absolute deviation from 0.5 of the average plaintiff win rate for a category of cases. Debt collection cases are excluded. Observations (categories) weighted by number of court decisions within the category. Categories are defined by court region, procedure, case type, and filing year. All columns include fixed effects for court region, procedure, case type, and filing year. Full table with coefficients for all fixed effects appears in Appendix E. +  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ . If we do not cluster standard errors by court, and simply use robust standard errors, the settlement variable in columns 1 and 5 are statistically significant at the 99.9% level. To address potential concerns about having only seven clusters, we ran the *cgmwildboot* command developed by Mitchell Petersen, Douglas Miller, and Judson Caskey for Stata that implemented Cameron, Gelbach, and Miller (2008)'s wild bootstrapping procedure for bootstrapping standard errors. After running 1000 successful resamples, the p-values in (1) – (5) are reported as 0.316, 0.170, .792, 0.434, and 0.128, respectively. Table F3 reports the same model with two-way clusters of courts and filing years. The results are qualitatively the same.

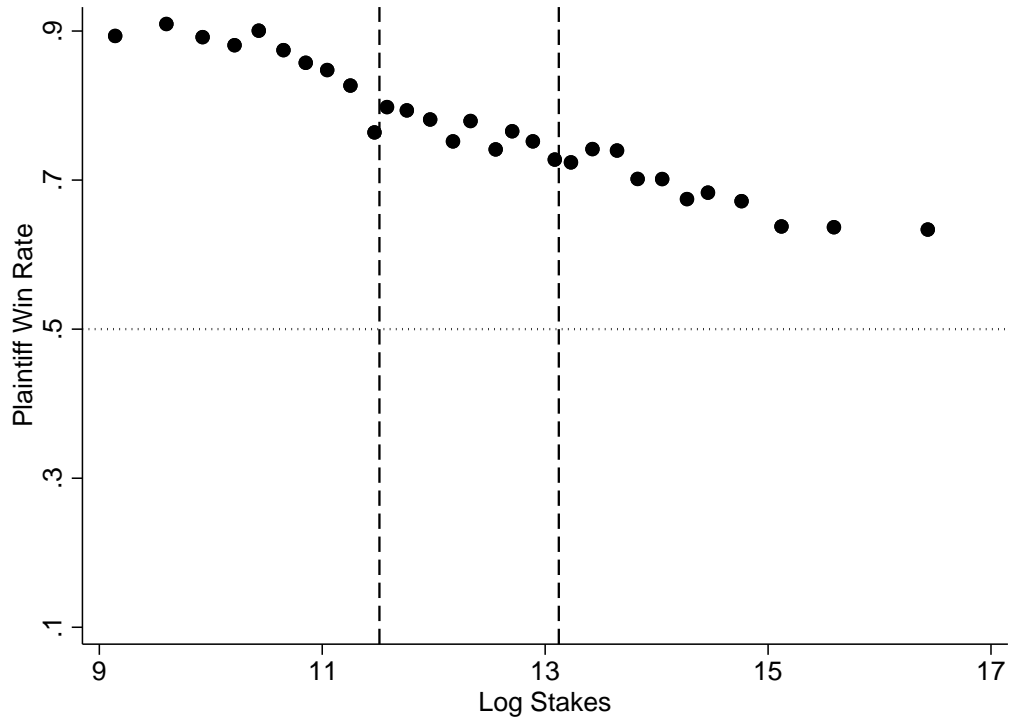
## Figures

FIGURE 1. RELATIONSHIP BETWEEN SETTLEMENT AND STAKES



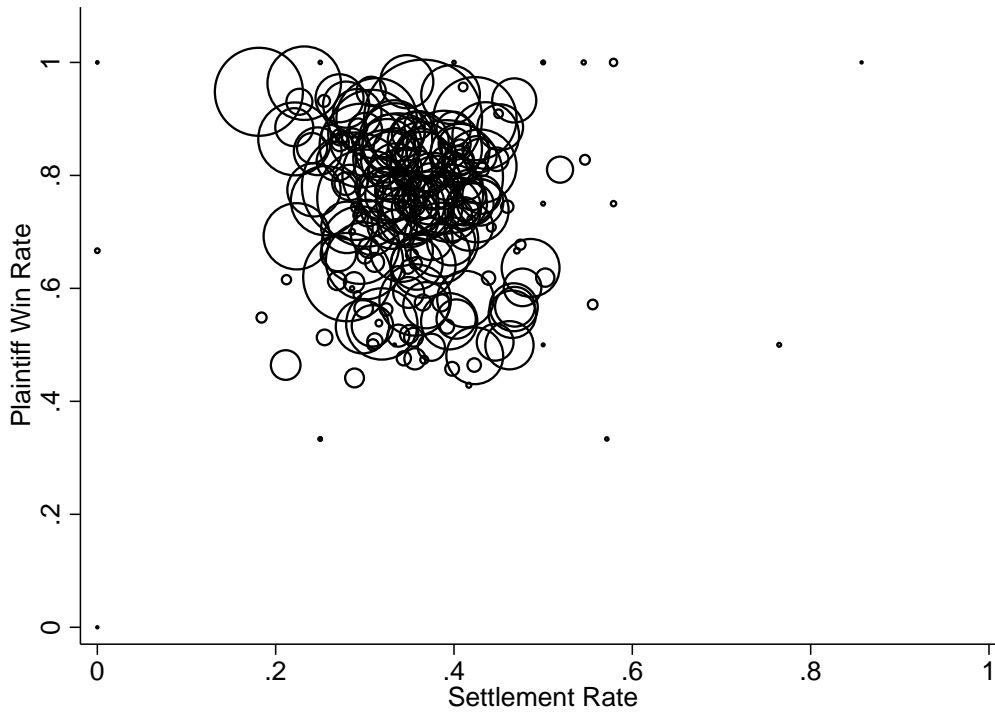
**Note.** Binned scatterplot representing the average log stakes and settlement for 30 quantiles of stakes. Vertical lines indicate the cutoffs for eligibility for summary procedure (NTD 100,000; logged value 11.5) and for ordinary procedure (NTD 500,000; logged value 13.2). Debt collection cases are excluded.

FIGURE 2. RELATIONSHIP BETWEEN STAKES AND PLAINTIFF WIN RATE,  
BY STAKES AND COURT LEVEL



**Note.** Binned scatterplot representing the average log stakes and settlement for 30 quantiles of stakes. Debt collection cases are excluded.

FIGURE 3. RELATIONSHIP BETWEEN SETTLEMENT RATE AND PLAINTIFF WIN RATE, BY PROCEDURE, COURT, AND CASE CATEGORIES; EXCLUDING DEBT COLLECTION CASES



**Note.** Scatterplot of 219 observations of the settlement rate and plaintiff win rate among cases within each court/procedure/case-type group. Size of circle is proportional to the number of court decisions represented by each observation. This figure visualizes Table 4 Column 1, but note that the case filing years are not used in creating groups in this figure, to make the pattern more easily visible. Debt collection cases are excluded.

**Appendix A. Robustness Checks: Including Cases with Counterclaims and Multiple Parties**

TABLE A1. PREDICTORS OF SETTLEMENT RATE, INCLUDING CASES WITH COUNTERCLAIMS AND MULTIPLE PARTIES, EXCLUDING DEBT COLLECTION CASES

	(1)	(2)	(3)	(4)	(5)
	All cases	High stake	Ordinary	Summary	Small claim
Ln Stakes	-0.018*** (0.002)	-0.014** (0.003)	-0.019*** (0.002)	-0.015** (0.004)	-0.030*** (0.004)
Corporate Plaintiff	0.028* (0.010)	0.018* (0.007)	0.072*** (0.005)	0.051+ (0.021)	-0.050* (0.015)
Corporate Defendant	-0.008+ (0.004)	0.001 (0.011)	-0.011 (0.007)	-0.034** (0.008)	0.016+ (0.008)
N	293083	51523	122023	104571	66489
Adjusted $R^2$	0.011	0.012	0.018	0.014	0.024

Note. See Table 2.

TABLE A2. PREDICTORS OF PLAINTIFF WIN RATE, INCLUDING CASES WITH COUNTERCLAIMS AND MULTIPLE PARTIES, EXCLUDING DEBT COLLECTION CASES

	(1)	(2)	(3)	(4)	(5)
	All cases	High stake	Ordinary	Summary	Small claim
Ln Stakes	-0.005* (0.002)	-0.002 (0.005)	-0.009* (0.003)	0.005 (0.003)	-0.036*** (0.004)
Corporate Plaintiff	0.041* (0.015)	0.022 (0.016)	0.002 (0.012)	0.011 (0.024)	0.115*** (0.012)
Corporate Defendant	-0.034*** (0.005)	-0.028** (0.007)	-0.044* (0.013)	0.022*** (0.002)	-0.096*** (0.006)
N	191633	35032	79920	67677	44036
Adjusted $R^2$	0.042	0.034	0.026	0.013	0.069

Note. See Table 3.



TABLE A3. RELATIONSHIP BETWEEN SETTLEMENT RATES AND ABSOLUTE DEVIATION OF PLAINTIFF WIN RATES FROM 50%, INCLUDING CASES WITH COUNTERCLAIMS AND MULTIPLE PARTIES, EXCLUDING DEBT COLLECTION CASES

	All cases	High stake	Ordinary	Summary	Small claim
(mean) settlement	-0.202* (0.074)	0.082 (0.112)	-0.088 (0.138)	-0.079 (0.065)	-0.241* (0.077)
N	1390	684	596	458	336
Adjusted $R^2$	0.646	0.552	0.591	0.425	0.549

Note. See Table 4.

## Appendix B. Robustness Checks: Treating Plaintiff Partial Win as Half a Win

TABLE B1. PREDICTORS OF PLAINTIFF WIN RATE, TREATING PLAINTIFF PARTIAL WIN AS HALF A WIN, EXCLUDING DEBT COLLECTION CASES

	(1)	(2)	(3)	(4)	(5)
	All cases	High stake	Ordinary	Summary	Small claim
Ln Stakes	-0.017*** (0.002)	-0.014+ (0.006)	-0.021*** (0.002)	-0.001 (0.002)	-0.048*** (0.002)
Corporate Plaintiff	0.107*** (0.009)	0.076*** (0.007)	0.089*** (0.007)	0.129*** (0.011)	0.091*** (0.010)
Corporate Defendant	-0.023* (0.008)	-0.017 (0.009)	-0.028 (0.019)	0.003 (0.003)	-0.072*** (0.007)
N	121928	15464	38883	44248	38797
Adjusted $R^2$	0.150	0.086	0.059	0.120	0.214

Note. See Table 3.

TABLE B2. RELATIONSHIP BETWEEN SETTLEMENT RATES AND ABSOLUTE DEVIATION OF PLAINTIFF WIN RATES FROM 50%, TREATING PLAINTIFF PARTIAL WIN AS HALF A WIN, EXCLUDING DEBT COLLECTION CASES

	(1)	(2)	(3)	(4)	(5)
	All cases	High stake	Ordinary	Summary	Small claim
(mean) settlement	-0.237** (0.051)	-0.027 (0.044)	0.064 (0.066)	0.082 (0.071)	-0.220* (0.067)
N	1297	586	528	444	325
Adjusted $R^2$	0.679	0.309	0.343	0.842	0.906

Note. See Table 4.

### Appendix C. Robustness Checks: Settlement Defined Narrowly

In this appendix, we report results when settlement is narrowly defined to include only successful in-court mediation and in-court conciliation. Excluded from the definition of settlement used in the text are plaintiff withdrawals.

TABLE C1. PREDICTORS OF SETTLEMENT RATE, EXCLUDING DEBT COLLECTION CASES

	(1)	(2)	(3)	(4)	(5)
	All cases	High stake	Ordinary	Summary	Small claim
Ln Stakes	-0.011** (0.002)	-0.022** (0.004)	-0.019*** (0.001)	-0.010 (0.006)	-0.011+ (0.005)
Corporate Plaintiff	-0.009 (0.006)	-0.011 (0.010)	0.031** (0.007)	-0.007 (0.011)	-0.029* (0.010)
Corporate Defendant	-0.009+ (0.005)	0.003 (0.011)	-0.022** (0.006)	-0.012+ (0.006)	-0.011 (0.008)
N	150585	18891	49105	54210	47270
Adjusted $R^2$	0.014	0.015	0.017	0.013	0.028

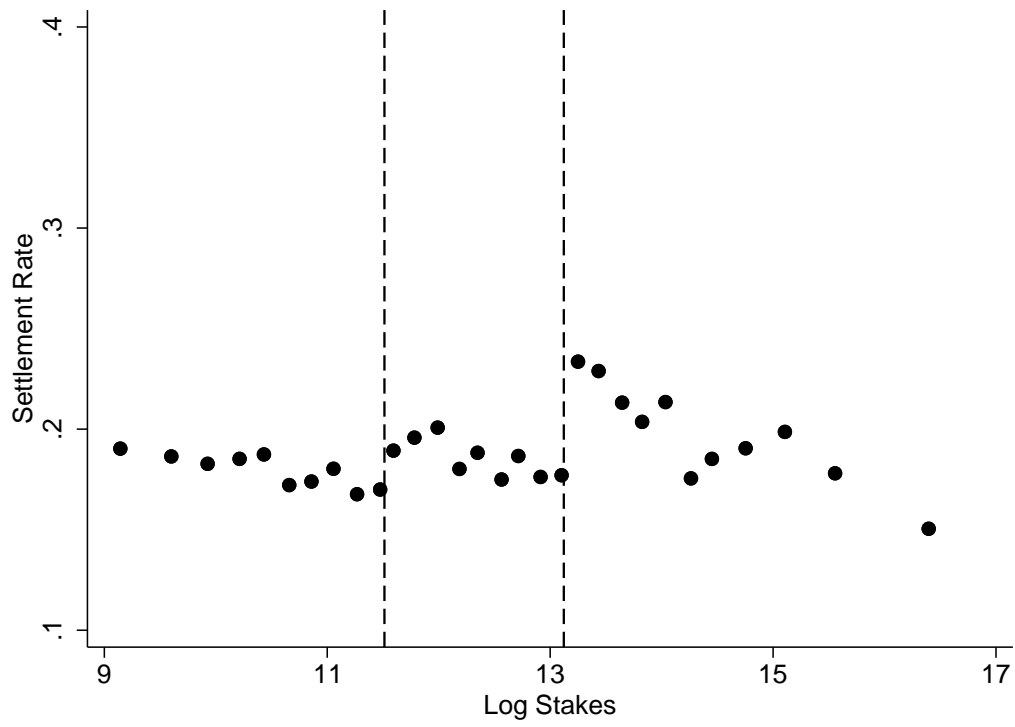
**Note.** See Table 2.

TABLE C2. RELATIONSHIP BETWEEN SETTLEMENT RATES AND ABSOLUTE DEVIATION OF PLAINTIFF WIN RATES FROM 50%, EXCLUDING DEBT COLLECTION CASES

	(1)	(2)	(3)	(4)	(5)
	All cases	High stake	Ordinary	Summary	Small claim
(mean) settlement	-0.148 (0.077)	0.183 (0.103)	0.131 (0.119)	-0.030 (0.055)	-0.189+ (0.092)
N	1297	586	528	444	325
Adjusted $R^2$	0.694	0.498	0.557	0.567	0.510

**Note.** See Table 4.

Figure C1. Relationship Between Settlement and Stakes



Note. See Figure 1.

## Appendix D. Other Descriptive Statistics and Supporting Tables

This appendix provides more descriptive statistics in tabular and graphic forms. Before showing them, a note about the administrative data is in order.

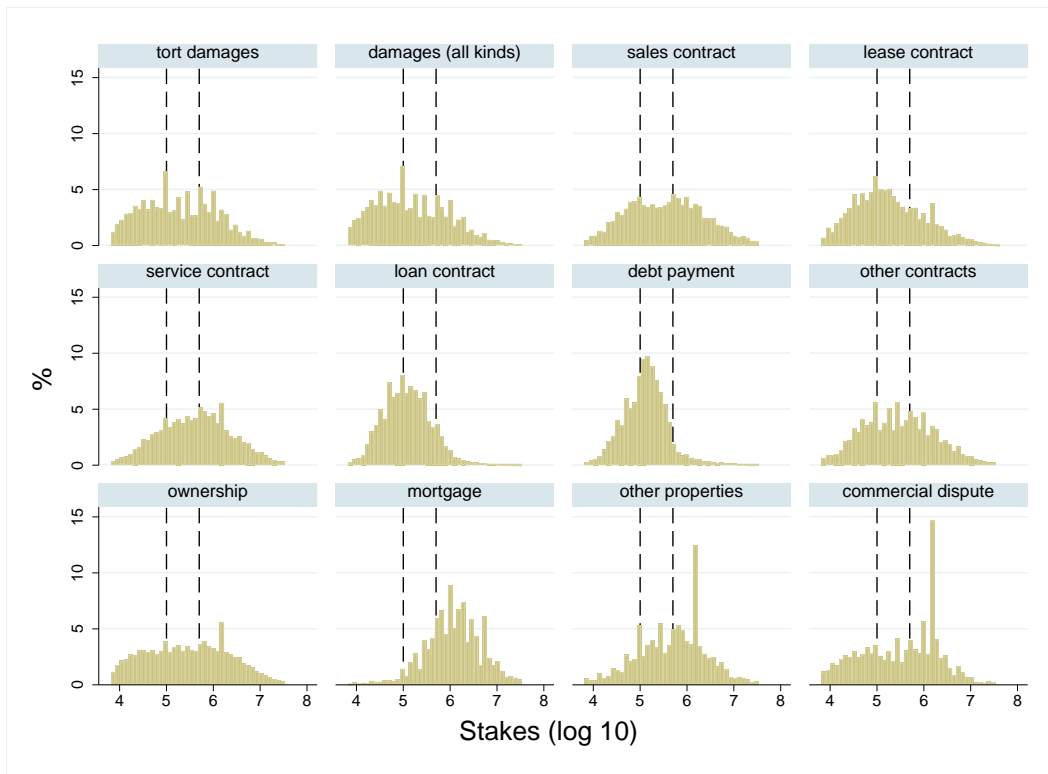
All but one variable in the raw data were provided to one of us (Chang) by the Judicial Yuan based on a codebook designed by Chang. One key variable, case types (nature of disputes such as contract, torts, property, etc.), was not contained in the raw data, but the administrative data included information that we used to construct case types. Each civil case filed in Taiwan is accompanied with an incomplete-sentence description of the nature of the plaintiff's claims, written by the clerks working in the filing office in each district court. Norms and conventions—and the similar nature of many disputes—result in frequent uses of several template descriptions. We used these template-like descriptions as the major source of information for case types. The Judicial Yuan of Taiwan also assigns certain types of cases (such as maritime, international trade, medical malpractice, labor, consumer, state liability, etc.) to separate tracks. These tracks serve two functions: first, some of these cases will be handled solely by a specialized division within a court. Second, some cases, such as medical malpractice cases and financial cases, are expected to be more complicated than other ordinary cases. While cases have been randomly assigned to judges, judges are still concerned that misfortune will result in one judge being assigned all the knotty cases. Thus, random assignments are conducted within each track, so that judges' case burdens are more likely to be even. The track of a case is indicated in the case name. We used it to construct case types as well.

TABLE D.1. ADDITIONAL SUMMARY STATISTICS

Variable	Mean	Median	Max	Min
Year Terminated	2013	2013	2015	2010
Case Duration (Days)	123	76	5030	1
Represented Plaintiff	0.24	--	1	0
Represented Defendant	0.18	--	1	0
Court Region				
Taipei	0.22	--	1	0
North	0.30	--	1	0
Central	0.20	--	1	0
South: Tainan	0.11	--	1	0
South: Kaohsiung	0.15	--	1	0
East	0.02	--	1	0
Island	0.002	--	1	0

**Note.** N=185,859, which are the total observations used in the regression reported in column (1) of Table 2.

Figure D.1. DISTRIBUTION OF STAKES BY CASE TYPES



**Note.** N = 419,817, which equals the observations used in the regression reported in column (1) of Table 2 (185,859), plus the debt collection cases reported in the preceding graphs in this appendix (233,958). Cases with stakes at 1 percentile and 99 percentiles are omitted, as in all the other reported regressions. The two dash lines represent the cutoff for small-claim, summary, and ordinary procedures.

## Appendix E. Complete Regression Results

TABLE E1. COMPLETE VERSION OF TABLE 2

	(1)	(2)	(3)	(4)	(5)
	All	High stakes	Ordinary	Summary	Small
Ln Stakes	-0.016*** (0.003)	-0.021*** (0.003)	-0.020*** (0.001)	-0.014+ (0.006)	-0.029** (0.005)
Corporate Plaintiff	-0.018 (0.010)	0.015 (0.009)	0.055*** (0.006)	-0.020 (0.017)	-0.056** (0.015)
Corporate Defendant	0.003 (0.005)	-0.003 (0.008)	-0.014 (0.010)	-0.009 (0.012)	-0.002 (0.007)
tort damages			Baseline category		
damages (all kinds)	0.014 (0.009)	0.008 (0.011)	-0.004 (0.018)	0.012+ (0.006)	0.014 (0.010)
sales contract	0.016+ (0.007)	0.052* (0.018)	0.036+ (0.018)	0.028+ (0.012)	-0.034 (0.021)
lease contract	0.004 (0.026)	-0.003 (0.052)	0.010 (0.018)	0.041 (0.040)	-0.067*** (0.007)
service contract	-0.012 (0.011)	-0.031* (0.010)	-0.016* (0.005)	0.005 (0.017)	-0.007 (0.016)
other contracts	0.000 (0.015)	-0.002 (0.010)	0.023 (0.013)	0.043+ (0.020)	-0.061* (0.017)
ownership	0.021** (0.005)	0.053*** (0.009)	0.058** (0.015)	0.013 (0.014)	0.006 (0.013)
mortgage	-0.023+ (0.012)	0.011 (0.022)	0.018 (0.018)	-0.052** (0.011)	
other properties	-0.013 (0.023)	-0.008 (0.031)	0.022 (0.025)	-0.014 (0.034)	0.219 (0.219)
commercial dispute	-0.035** (0.008)	0.003 (0.028)	-0.009 (0.013)	-0.033+ (0.015)	-0.038* (0.015)
filing year=1998	0.688*** (0.012)	0.712*** (0.008)	0.695*** (0.013)		
filing year=2000	-0.291*** (0.009)	-0.287*** (0.012)	-0.285*** (0.009)		
filing year=2002	0.648***	0.651***	0.673***		



	(0.014)	(0.009)	(0.010)		
filing year=2003	0.335 <sup>+</sup>	0.201 <sup>***</sup>	0.385 <sup>+</sup>		
	(0.172)	(0.011)	(0.166)		
filing year=2004	0.258 <sup>+</sup>	0.284 <sup>+</sup>	0.119	0.443 <sup>**</sup>	
	(0.109)	(0.131)	(0.198)	(0.088)	
filing year=2005	-0.118	-0.060	-0.076	-0.377 <sup>***</sup>	
	(0.104)	(0.152)	(0.160)	(0.014)	
filing year=2006	0.009	-0.001	-0.011	0.156	
	(0.101)	(0.080)	(0.094)	(0.433)	
filing year=2007	0.058 <sup>*</sup>	0.082	0.027	0.519 <sup>*</sup>	
	(0.022)	(0.076)	(0.030)	(0.208)	
filing year=2008	-0.130 <sup>*</sup>	-0.151 <sup>**</sup>	-0.140 <sup>*</sup>	-0.060	0.344
	(0.040)	(0.029)	(0.040)	(0.038)	(0.190)
filing year=2009	-0.066 <sup>**</sup>	-0.072 <sup>**</sup>	-0.068 <sup>*</sup>	-0.073 <sup>***</sup>	-0.035 <sup>+</sup>
	(0.012)	(0.019)	(0.023)	(0.008)	(0.018)
filing year=2010			Baseline category		
filing year=2011	0.008	-0.013	-0.006	0.003	0.032 <sup>+</sup>
	(0.007)	(0.007)	(0.006)	(0.009)	(0.014)
filing year=2012	-0.011	-0.013	0.001	-0.022	-0.008
	(0.009)	(0.011)	(0.005)	(0.012)	(0.019)
filing year=2013	-0.011	0.006	0.003	-0.012	-0.012
	(0.007)	(0.005)	(0.006)	(0.013)	(0.020)
filing year=2014	-0.009	0.023	0.013	-0.014	-0.013
	(0.008)	(0.015)	(0.010)	(0.014)	(0.015)
filing year=2015	0.020	0.084 <sup>**</sup>	0.073 <sup>*</sup>	0.014	0.008
	(0.018)	(0.019)	(0.020)	(0.023)	(0.023)
Taipei			Baseline category		
North	0.065 <sup>***</sup>	0.015 <sup>***</sup>	0.027 <sup>***</sup>	0.085 <sup>***</sup>	0.079 <sup>***</sup>
	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)
Central	0.103 <sup>***</sup>	0.063 <sup>***</sup>	0.087 <sup>***</sup>	0.082 <sup>***</sup>	0.149 <sup>***</sup>
	(0.001)	(0.002)	(0.001)	(0.003)	(0.001)
South1: Tainan	0.067 <sup>***</sup>	0.069 <sup>***</sup>	0.073 <sup>***</sup>	0.098 <sup>***</sup>	0.039 <sup>***</sup>
	(0.001)	(0.001)	(0.002)	(0.003)	(0.005)
South2:	0.041 <sup>***</sup>	0.040 <sup>***</sup>	0.068 <sup>***</sup>	0.044 <sup>***</sup>	0.028 <sup>***</sup>
Kaohsiung	(0.001)	(0.001)	(0.001)	(0.002)	(0.004)
East	0.100 <sup>***</sup>	0.046 <sup>***</sup>	0.061 <sup>***</sup>	0.103 <sup>***</sup>	0.157 <sup>***</sup>

	(0.003)	(0.003)	(0.003)	(0.005)	(0.002)
Island	0.119***	0.027***	0.024***	0.216***	0.325***
	(0.005)	(0.004)	(0.002)	(0.006)	(0.005)
small-claim procedure summary procedure ordinary procedure	Baseline category 0.034+ (0.015) 0.085** (0.019)	Baseline category -0.009 (0.030)			
Constant	0.452*** (0.036)	0.619*** (0.057)	0.577*** (0.016)	0.445*** (0.074)	0.616*** (0.058)
Observations	185859	23217	60375	67071	58413
Adjusted $R^2$	0.010	0.013	0.016	0.010	0.026

TABLE E2. COMPLETE VERSION OF TABLE 3

	(1)	(2)	(3)	(4)	(5)
	All	High stakes	Ordinary	Summary	Small
Ln Stakes	-0.013*** (0.002)	-0.009 (0.009)	-0.021*** (0.003)	0.005+ (0.002)	-0.032*** (0.003)
Corporate Plaintiff	0.095*** (0.010)	0.070** (0.013)	0.044* (0.013)	0.109*** (0.012)	0.106*** (0.011)
Corporate Defendant	-0.054*** (0.005)	-0.043** (0.009)	-0.055* (0.022)	-0.021*** (0.003)	-0.102*** (0.004)
tort damages damages (all kinds)			Baseline category		
	-0.037+ (0.018)	-0.036 (0.049)	-0.033 (0.040)	-0.046+ (0.023)	-0.021+ (0.010)
sales contract	0.005 (0.005)	-0.022 (0.014)	0.021 (0.016)	-0.019* (0.007)	0.029* (0.008)
lease contract	0.016 (0.009)	0.001 (0.028)	-0.030 (0.018)	0.041** (0.010)	0.018* (0.006)
service contract	-0.064** (0.012)	-0.115*** (0.016)	-0.063* (0.022)	-0.090*** (0.006)	-0.023 (0.015)
other contracts	-0.040** (0.008)	-0.149*** (0.011)	-0.163*** (0.011)	-0.021* (0.008)	0.009 (0.012)
ownership	0.030* (0.008)	-0.008 (0.011)	-0.026 (0.011)	0.060** (0.008)	0.069** (0.012)

	(0.012)	(0.012)	(0.014)	(0.012)	(0.018)
mortgage	0.073**	0.029	0.033	0.091**	
	(0.017)	(0.020)	(0.020)	(0.016)	
other properties	-0.209***	-0.197**	-0.230***	-0.196***	-0.078
	(0.021)	(0.038)	(0.031)	(0.022)	(0.155)
commercial	-0.124**	-0.157***	-0.119**	-0.231**	-0.069
dispute	(0.032)	(0.019)	(0.021)	(0.052)	(0.038)
filing year=2000	-0.602***	-0.491***	-0.492***		
	(0.013)	(0.020)	(0.009)		
filing year=2003	-0.669***	-0.672***	-0.684***		
	(0.016)	(0.032)	(0.021)		
filing year=2004	-0.170	0.069	0.031	-0.721***	
	(0.168)	(0.133)	(0.139)	(0.014)	
filing year=2005	0.344***	0.403***	0.360***	0.157***	
	(0.038)	(0.041)	(0.026)	(0.004)	
filing year=2006	-0.050	-0.039	-0.035	0.192***	
	(0.038)	(0.152)	(0.045)	(0.006)	
filing year=2007	-0.039	0.082	-0.008	-0.756***	
	(0.038)	(0.055)	(0.049)	(0.015)	
filing year=2008	-0.073+	-0.003	-0.048	-0.171*	0.088***
	(0.031)	(0.049)	(0.047)	(0.062)	(0.006)
filing year=2009	-0.031**	-0.017	-0.020	-0.040*	-0.029*
	(0.008)	(0.026)	(0.020)	(0.011)	(0.011)
filing year=2010			Baseline category		
filing year=2011	0.001	0.010	0.010	0.004	-0.013*
	(0.006)	(0.017)	(0.013)	(0.003)	(0.004)
filing year=2012	0.009	0.023	0.014	0.011	-0.003
	(0.011)	(0.030)	(0.021)	(0.006)	(0.011)
filing year=2013	0.020*	0.017	0.016	0.026**	0.010
	(0.008)	(0.027)	(0.017)	(0.005)	(0.011)
filing year=2014	0.025*	0.014	0.028	0.024*	0.018*
	(0.010)	(0.034)	(0.023)	(0.007)	(0.006)
filing year=2015	0.040*	0.062	0.050	0.040**	0.023+
	(0.015)	(0.046)	(0.038)	(0.010)	(0.011)
Taipei			Baseline category		
North	0.042***	0.042***	0.054***	0.045***	0.024***

	(0.001)	(0.002)	(0.002)	(0.001)	(0.003)
Central	0.031***	0.074***	0.061***	0.019***	0.010***
	(0.001)	(0.002)	(0.002)	(0.002)	(0.001)
South1: Tainan	0.044***	0.055***	0.059***	0.031***	0.034***
	(0.002)	(0.003)	(0.003)	(0.001)	(0.004)
South2:	0.037***	0.043***	0.054***	0.024***	0.023***
Kaohsiung	(0.001)	(0.002)	(0.002)	(0.001)	(0.004)
East	0.002	0.047***	0.032***	-0.010**	-0.002
	(0.002)	(0.005)	(0.004)	(0.002)	(0.004)
Island	-0.021**	0.089***	0.007	-0.005*	-0.183***
	(0.004)	(0.004)	(0.008)	(0.002)	(0.004)
small-claim procedure summary procedure	Baseline category -0.029** (0.006)	Baseline category			
ordinary procedure	-0.102*** (0.008)	-0.217*** (0.009)			
Constant	0.948*** (0.022)	0.994*** (0.132)	0.983*** (0.039)	0.678*** (0.031)	1.139*** (0.032)
Observations	121928	15464	38883	44248	38797
Adjusted $R^2$	0.067	0.036	0.030	0.033	0.065

TABLE E3. COMPLETE VERSION OF TABLE 4

	(1)	(2)	(3)	(4)	(5)
	All	High	Ordinary	Summary	Small
(mean) settlement	-0.150* (0.061)	0.092 (0.090)	0.001 (0.093)	0.037 (0.058)	-0.245* (0.082)
tort damages			Baseline category		
damages (all kinds)	-0.036 (0.020)	-0.010 (0.035)	-0.027 (0.038)	-0.048 (0.026)	-0.030+ (0.015)
sales contract	0.023* (0.006)	-0.009 (0.015)	0.010 (0.007)	0.028+ (0.013)	0.008 (0.009)
lease contract	0.011 (0.009)	0.053* (0.019)	-0.017+ (0.009)	0.046* (0.014)	-0.034* (0.010)
service contract	-0.090***	-0.101**	-0.088***	-0.093***	-0.112***

	(0.010)	(0.019)	(0.015)	(0.010)	(0.012)
other contracts	-0.041*	-0.117***	-0.163***	-0.014	-0.007
	(0.012)	(0.012)	(0.009)	(0.015)	(0.020)
ownership	0.025+	-0.012	-0.037*	0.045*	0.069**
	(0.010)	(0.011)	(0.013)	(0.013)	(0.016)
mortgage	0.040+	0.028	0.011	0.071**	
	(0.017)	(0.023)	(0.016)	(0.014)	
other properties	-0.144***	0.017	-0.133***	-0.162***	0.050*
	(0.019)	(0.068)	(0.022)	(0.016)	(0.015)
commercial	-0.113**	-0.062+	-0.125***	-0.153***	-0.070
dispute	(0.030)	(0.029)	(0.008)	(0.022)	(0.053)
filing year=2000	0.328***	0.491***	0.486***		
	(0.029)	(0.036)	(0.035)		
filing year=2003	0.238***	0.344***	0.265**		
	(0.032)	(0.049)	(0.046)		
filing year=2004	0.290***	0.431***	0.362***	0.216***	
	(0.013)	(0.029)	(0.039)	(0.016)	
filing year=2005	0.295***	0.415***	0.341***	0.171***	
	(0.048)	(0.047)	(0.049)	(0.020)	
filing year=2006	0.234**	0.404***	0.264**	0.197***	
	(0.050)	(0.036)	(0.047)	(0.020)	
filing year=2007	0.103*	0.145	0.108*	0.195***	
	(0.032)	(0.082)	(0.043)	(0.021)	
filing year=2008	-0.013	0.061	0.000	0.077	-0.021
	(0.037)	(0.048)	(0.045)	(0.055)	(0.030)
filing year=2009	-0.039**	-0.010	-0.018	-0.037*	-0.048**
	(0.008)	(0.019)	(0.019)	(0.014)	(0.013)
filing year=2010			Baseline category		
filing year=2011	0.001	0.000	0.006	0.005	-0.004
	(0.004)	(0.012)	(0.011)	(0.004)	(0.007)
filing year=2012	0.009	0.015	0.013	0.016+	0.000
	(0.011)	(0.019)	(0.016)	(0.007)	(0.012)
filing year=2013	0.023*	0.002	0.011	0.036**	0.022
	(0.009)	(0.020)	(0.014)	(0.008)	(0.011)
filing year=2014	0.032*	-0.003	0.025	0.032**	0.037**
	(0.010)	(0.018)	(0.018)	(0.007)	(0.008)

filing year=2015	0.057*	0.050+	0.053	0.054**	0.053*
	(0.017)	(0.023)	(0.030)	(0.012)	(0.016)
Taipei			Baseline category		
North	0.049***	0.029***	0.058***	0.029**	0.045***
	(0.004)	(0.002)	(0.003)	(0.005)	(0.007)
Central	0.044***	0.063***	0.066***	0.002	0.048**
	(0.006)	(0.005)	(0.008)	(0.006)	(0.012)
South1: Tainan	0.059***	0.058***	0.072***	0.021**	0.045***
	(0.005)	(0.006)	(0.007)	(0.005)	(0.004)
South2:	0.046***	0.042***	0.066***	0.013*	0.032***
Kaohsiung	(0.003)	(0.003)	(0.005)	(0.004)	(0.004)
East	0.025**	0.110***	0.075***	-0.024**	0.016
	(0.006)	(0.002)	(0.005)	(0.006)	(0.012)
Island	0.074***	0.188***	0.112***	0.025***	0.001
	(0.004)	(0.007)	(0.002)	(0.003)	(0.006)
Small-claim	Baseline				
procedure	category				
Summary	-0.084***	Baseline			
procedure	(0.005)	category			
Ordinary	-0.180***	-0.197***			
procedure	(0.011)	(0.004)			
Constant	0.393***	0.323***	0.178**	0.255***	0.420***
	(0.019)	(0.051)	(0.043)	(0.009)	(0.024)
Observations	1297	586	528	444	325
Adjusted $R^2$	0.697	0.490	0.553	0.568	0.542

## Appendix F. Other Robustness Checks

TABLE F1. PREDICTORS OF SETTLEMENT RATE, EXCLUDING DEBT COLLECTION CASES, TWO-WAY CLUSTERED BY COURT AND FILING YEAR, EXCLUDING DEBT COLLECTION CASES

	All	High stakes	Ordinary	Summary	Small
Ln Stakes	-0.016*** (0.003)	-0.021** (0.005)	-0.020*** (0.003)	-0.014* (0.005)	-0.029*** (0.004)
Observations	185859	23217	60375	67071	58413
Adjusted $R^2$	0.010	0.013	0.016	0.010	0.026

**Note.** See Table 2. Coefficients of two corporation dummies are omitted from the table.

TABLE F2. PREDICTORS OF PLAINTIFF WIN RATE, EXCLUDING DEBT COLLECTION CASES, TWO-WAY CLUSTERED BY COURT AND FILING YEAR, EXCLUDING DEBT COLLECTION CASES

	All	High stakes	Ordinary	Summary	Small
Ln Stakes	-0.013*** (0.001)	-0.009 (0.008)	-0.021*** (0.001)	0.005+ (0.002)	-0.032*** (0.003)
Observations	121928	15464	38883	44248	38797
Adjusted $R^2$	0.067	0.036	0.030	0.033	0.065

**Note.** See Table 3. Coefficients of two corporation dummies are omitted from the table.

TABLE F3. RELATIONSHIP BETWEEN SETTLEMENT RATES AND ABSOLUTE DEVIATION OF PLAINTIFF WIN RATES FROM 50%, TWO-WAY CLUSTERED BY COURT AND FILING YEAR, EXCLUDING DEBT COLLECTION CASES

	(1)	(2)	(3)	(4)	(5)
	All cases	High stake	Ordinary	Summary	Small claim
(mean) settlement	-0.150+ (0.062)	0.092 (0.087)	0.001 (0.077)	0.037 (0.094)	-0.245** (0.058)
N	1297	586	528	444	325
Adjusted $R^2$	0.697	0.490	0.553	0.568	0.542

**Note.** See Table 4. Coefficients of two corporation dummies are omitted from the table.

**Appendix G. Robustness Checks: Inclusion of Debt Collection Cases.**

Table G1. PREDICTORS OF SETTLEMENT RATE

	(1)	(2)	(3)	(4)	(5)
	All cases	High stake	Ordinary	Summary	Small claim
Ln Stakes	-0.012 (0.006)	-0.017*** (0.002)	-0.009 (0.007)	-0.004 (0.005)	-0.019** (0.004)
Corporate Plaintiff	-0.046** (0.011)	0.001 (0.006)	0.008 (0.018)	-0.037+ (0.018)	-0.075** (0.015)
Corporate Defendant	0.016 (0.009)	0.007 (0.008)	0.012+ (0.005)	0.010 (0.017)	0.002 (0.006)
N	419817	26991	83071	178268	158478
Adjusted $R^2$	0.081	0.013	0.040	0.105	0.078

**Note.** Debt collection cases are included. See Table 2.

TABLE G2. PREDICTORS OF PLAINTIFF WIN RATES

	(1)	(2)	(3)	(4)	(5)
	All cases	High stake	Ordinary	Summary	Small claim
Ln Stakes	-0.016*** (0.003)	-0.010 (0.008)	-0.030*** (0.003)	0.001 (0.002)	-0.013*** (0.001)
Corporate Plaintiff	0.132*** (0.013)	0.098*** (0.013)	0.114*** (0.014)	0.142*** (0.008)	0.117*** (0.013)
Corporate Defendant	-0.079*** (0.011)	-0.061** (0.012)	-0.088** (0.022)	-0.038*** (0.004)	-0.108*** (0.004)
N	324356	18023	56190	141828	126338
Adjusted $R^2$	0.174	0.042	0.099	0.159	0.117

**Note.** Debt collection cases are included. See Table 3.

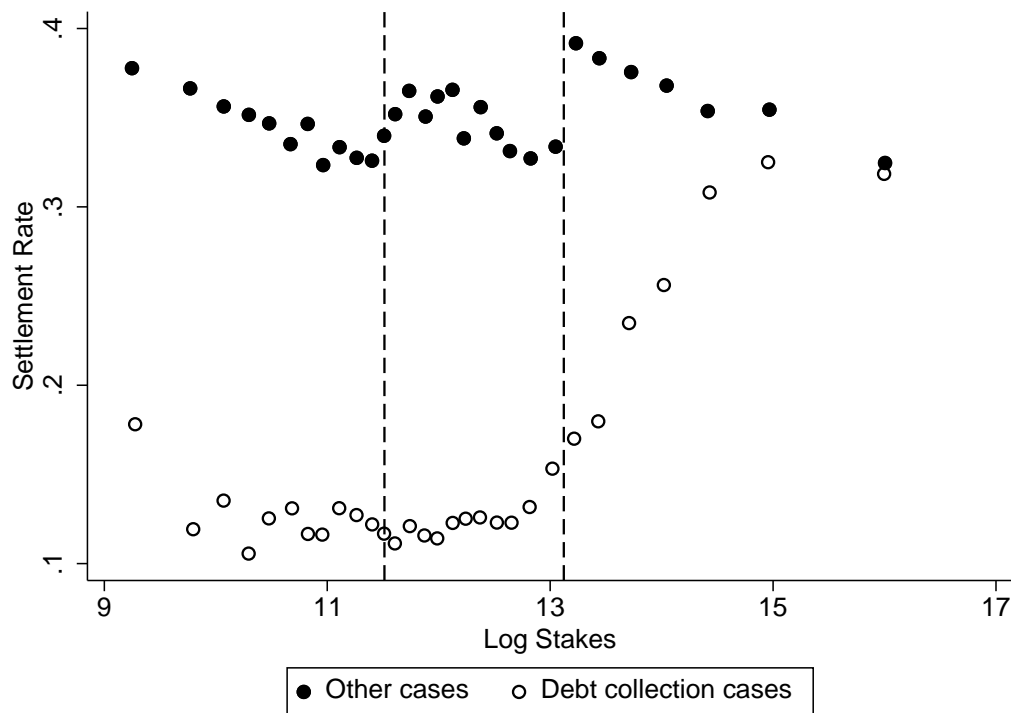


TABLE G3. RELATIONSHIP BETWEEN SETTLEMENT RATES AND ABSOLUTE DEVIATION OF PLAINTIFF WIN RATES FROM 50%

	(1)	(2)	(3)	(4)	(5)
	All cases	High stake	Ordinary	Summary	Small claim
(mean) settlement	-0.193* (0.071)	0.047 (0.083)	-0.447*** (0.060)	-0.154* (0.046)	-0.137 (0.071)
N	1597	689	635	542	420
Adjusted $R^2$	0.828	0.484	0.776	0.914	0.785

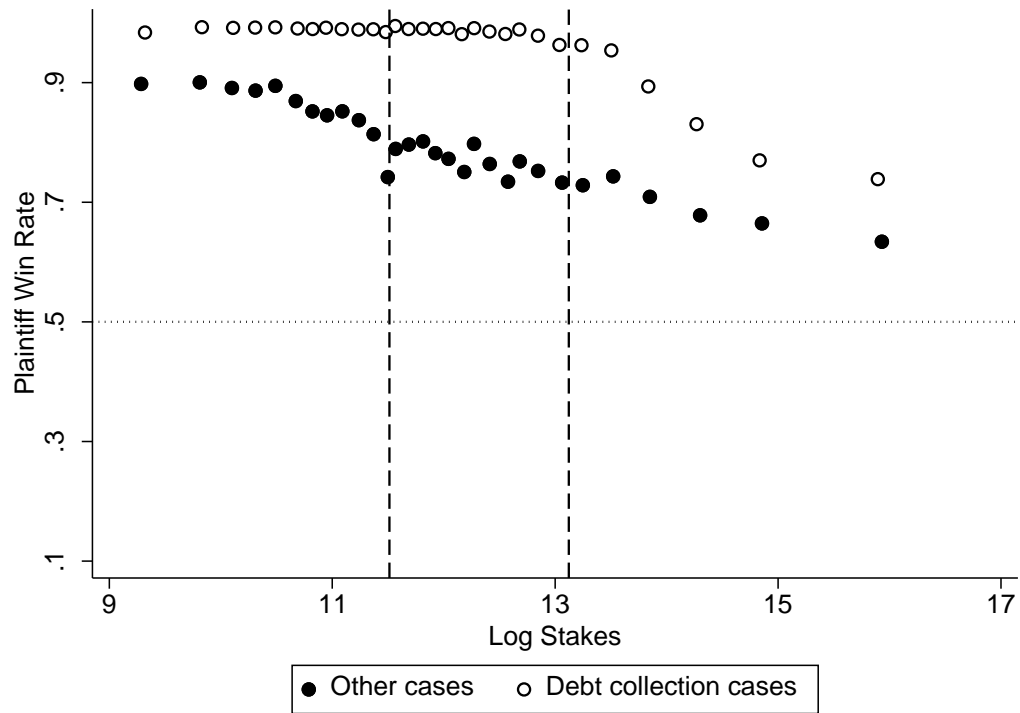
**Note.** Debt collection cases are included. See Table 4.

Figure G1. RELATIONSHIP BETWEEN SETTLEMENT AND STAKES



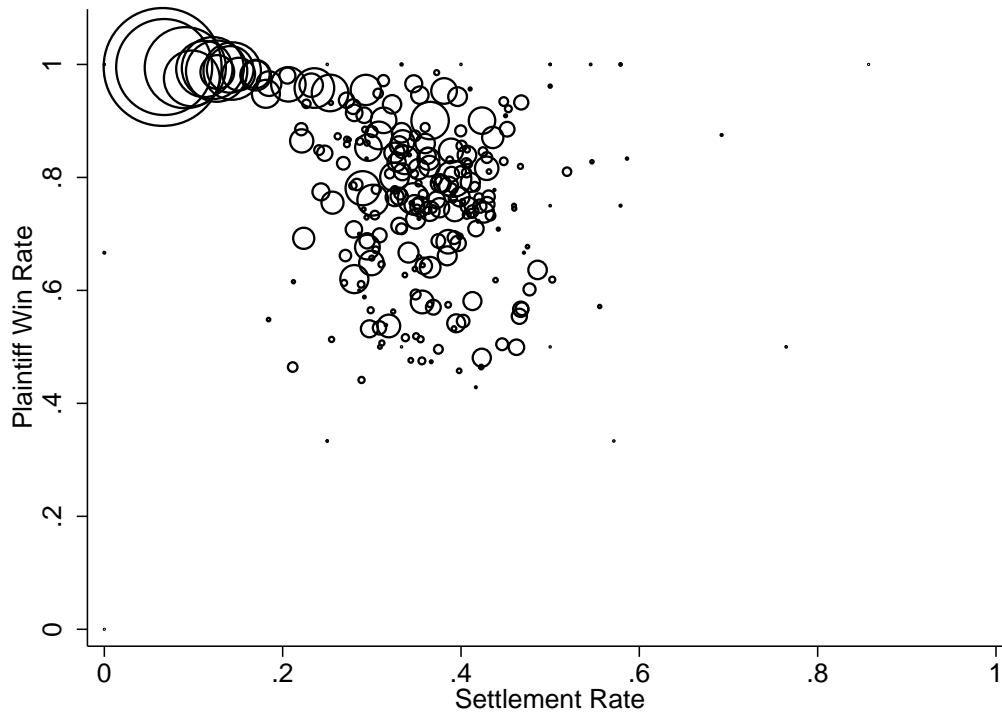
**Note.** Debt collection cases are included. See note to Figure 1 for more explanations.

FIGURE G2. RELATIONSHIP BETWEEN STAKES AND PLAINTIFF WIN RATE,  
BY STAKES AND COURT LEVEL



**Note.** Debt collection cases are included. See Figure 2.

FIGURE G3. RELATIONSHIP BETWEEN SETTLEMENT RATE AND PLAINTIFF WIN RATE, BY PROCEDURE, COURT, AND CASE CATEGORIES



**Note.** Debt collection cases are included. Scatterplot of 261 observations of the settlement rate and plaintiff win rate among cases within each court/procedure/case-type group. Size of circle is proportional to the number of court decisions represented by each observation. This figure visualizes Table G3 Column 1, but note that the case filing years are not used in creating groups in this figure, to make the pattern more easily visible. See Figure 3.

## References

- Arlen, Jennifer, and Stephan Tontrup. 2015. Does the Endowment Effect Justify Legal Intervention? The Debiasing Effect of Institutions. *The Journal of Legal Studies* 44 (1):143–182.
- Bebchuk, Lucian Arye. 1984. Litigation and Settlement Under Imperfect Information. *The RAND Journal of Economics* 15 (3):404–415.
- Cameron, A. Colin, Jonah B. Gelbach, and Douglas L. Miller. 2008. Bootstrap-based Improvements for Inference with Clustered Errors. *The Review of Economics and Statistics* 90 (3):414–427.
- Chang, Yun-chien. 2016. The Evolution of Property Law in Taiwan: An Unconventional Interest Group Story. In *Private Law in China and Taiwan: Economic and Legal Analyses* 212–244, edited by Yun-chien Chang, Wei Shen and Wen Yeu Wang. Cambridge: Cambridge University Press.
- Chang, Yun-chien, Weitseng Chen, and Ying Chieh Wu. 2017. *Property and Trust Law in Taiwan*. Alphen aan den Rijn: Wolters Kluwer.
- Chang, Yun-chien, Nuno Garoupa, and Martin Wells. 2019. Drawing the Legal Family Tree: An Empirical Comparative Study of 108 Property Doctrines in 154 Jurisdictions. *working paper*.
- Chang, Yun-chien, and William H.J. Hubbard. 2020. Speedy Adjudication in Hard Cases and Low Settlement Rates in Easy Cases: An Empirical Analysis of Taiwan Courts with Comparison to U.S. Federal Courts. In *Selection and Decision in Judicial Process Around the World: Empirical Inquiries*, edited by Yun-chien Chang. Cambridge: Cambridge University Press.
- Chang, Yun-chien, and Daniel Klerman. 2019. Settlement Rates Around the World. *working paper*.
- Chang, Yun-chien, and Su-hao Tu. 2019 forthcoming. Two-way Selections Between Flat-fee Attorneys and Litigants: Theoretical and Empirical Analyses. *European Journal of Law and Economics*.
- Cooter, Robert D., and Daniel L. Rubinfeld. 1989. Economic Analysis of Legal Disputes and Their Resolution. *Journal of Economic Literature* 27 (3):1067–1097.
- Cui, Wei, and Zhiyuan Wang. 2017. The Selection of Litigation against Government Agencies: Evidence from China. *Review of Law & Economics* 13 (3):1–41.
- Eisenberg, Theodore. 1990. Testing the Selection Effect: A New Theoretical Framework with Empirical Tests. *The Journal of Legal Studies* 19 (2):337–358.

- . 1991. The Relationship Between Plaintiff Success Rates Before Trial and at Trial. *Journal of the Royal Statistical Society. Series A (Statistics in Society)* 154:111–116.
- Eisenberg, Theodore, and Henry S. Farber. 1997. The Litigious Plaintiff Hypothesis: Case Selection and Resolution. *RAND Journal of Economics* 28:S92–S112.
- Eisenberg, Theodore, and Kuo-Chang Huang. 2012. The Effect of Rules Shifting Supreme Court Jurisdiction from Mandatory to Discretionary—An Empirical Lesson from Taiwan. *International Review of Law & Economics* 32 (1):3–18.
- Eisenberg, Theodore, and Charlotte Lanvers. 2009. What Is the Settlement Rate and Why Should We Care? *Journal of Empirical Legal Studies* 6 (1):111–146.
- Gelbach, Jonah B. 2018. The Reduced Form of Litigation Models and the Plaintiff's Win Rate. *Journal of Law & Economics* 61 (1):125–157.
- Gould, John P. 1973. The Economics of Legal Conflicts. *The Journal of Legal Studies* 2 (2):279–300.
- Hadfield, Gillian K. 2004. Where Have All the Trials Gone? Settlements, Nontrial Adjudications, and Statistical Artifacts in the Changing Disposition of Federal Civil Cases. *Journal of Empirical Legal Studies* 1 (3):705–734.
- Hsu, Ching-fang, Ivan Kan-hsueh Chiang, and Yun-chien Chang. 2019. When Pro Bono Becomes a Profane Word: Clientele and Compensation Behind Lawyers' Legal Aid Participation. *Working paper*, <https://ssrn.com/abstract=3334506>.
- Huang, Kuo-Chang. 2009. Does Discovery Promote Settlement? An Empirical Answer. *Journal of Empirical Legal Studies* 6 (2):241–278.
- . 2016. The Effect of Stakes on Settlement: An Empirical Lesson from Taiwan. In *Research Handbook on Comparative Law and Economics* 369–392, edited by Theodore Eisenberg and Giovanni Battista Ramello. Northampton, Mass.: Edward Elgar.
- Hubbard, William H.J. 2016. Sinking Costs to Force or Deter Settlement. *The Journal of Law, Economics, and Organization* 32:545–585.
- . 2019. Stalling, Conflict, and Settlement. *Coase-Sandor Working Paper Series in Law and Economics, No. 839*.
- Kessler, Daniel, Thomas Meites, and Geoffrey Miller. 1996. Explaining Deviations from the Fifty-percent Rule: A Multimodal Approach to the Selection of Cases for Litigation. *The Journal of Legal Studies* 25 (1):233–259.
- Klerman, Daniel. 2012. The Selection of Thirteenth-Century Disputes for Litigation. *Journal of Empirical Legal Studies* 9:320–346.
- Klerman, Daniel, and Yoon-Ho Alex Lee. 2014. Inferences from Litigated Cases. *The*

- Journal of Legal Studies* 43 (2):209–248.
- Klerman, Daniel, Yoon-Ho Alex Lee, and Lawrence Liu. 2018. Litigation and Selection with Correlated Two-Sided Incomplete Information. *American Law and Economics Review* 20 (2):382–459.
- Landes, William M. 1971. An Economic Analysis of the Courts. *The Journal of Law & Economics* 14 (1):61–107.
- Lee, Yoon-Ho Alex, and Daniel Klerman. 2016. The Priest-Klein Hypotheses: Proofs and Generality. *International Review of Law and Economics* 48:59–76.
- Lin, Chang-Ching, Kong-Pin Chen, Kuo-Chang Huang, and Ya-Ting Yu. 2016. The Research Design and Methodology of the 2011 Civil Justice Survey in Taiwan. *Survey Research—Method and Application* (36):87–123.
- Posner, Richard A. 1973. An Economic Approach to Legal Procedure and Judicial Administration. *The Journal of Legal Studies* 2:399–458.
- Priest, George L., and Benjamin Klein. 1984. The Selection of Disputes for Litigation. *The Journal of Legal Studies* 13 (1):1–56.
- Ramseyer, J. Mark. 2015. *Second-Best Justice: The Virtues of Japanese Private Law*. Chicago, IL: The University of Chicago Press.
- Ramseyer, J. Mark, and Minoru Nakazato. 1989. The Rational Litigant: Settlement Amounts and Verdict Rates in Japan. *The Journal of Legal Studies* 18 (2):263–290.
- Shavell, Steven. 1996. Any Frequency of Plaintiff Victory at Trial Is Possible. *The Journal of Legal Studies* 25 (2):493–501.
- Siegelman, Peter, and John J. Donohue. 1995. The Selection of Employment Discrimination Disputes for Litigation: Using Business Cycle Effects to Test the Priest-Klein Hypothesis. *The Journal of Legal Studies* 24 (2):427–462.
- Siegelman, Peter, and Joel Waldfogel. 1999. Toward a Taxonomy of Disputes: New Evidence through the Prism of the Priest/Klein Model. *The Journal of Legal Studies* 28 (1):101–130.
- Spier, Kathryn E. 1992. The Dynamics of Pretrial Negotiation. *Review of Economic Studies* 59:93–108.
- Stanley, Linda R., and Don L. Coursey. 1990. Empirical Evidence on the Selection Hypothesis and the Decision to Litigate or Settle *Journal of Legal Studies* 19:145–172.
- Waldfogel, Joel. 1995. The Selection Hypothesis and the Relationship between Trial and Plaintiff Victory. *Journal of Political Economy* 103 (2):229–260.
- . 1998. Reconciling Asymmetric Information and Divergent Expectations

Theories of Litigation. *The Journal of Law and Economics* 41 (2):451–476.

Wang, Tay-sheng. 2002. The Legal Development of Taiwan in the 20th Century: Toward a Liberal and Democratic Country. *Pacific Rim Law & Policy Journal* 11:531–560.