## CENTRO DE INVESTIGACIÓN ECONÓMICA

# **Discussion Paper Series**

# Litigation and Settlement: New Evidence from Labor Courts in Mexico

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September 2006 Discussion Paper 06-06

## Litigation and Settlement: New Evidence from Labor Courts in Mexico\*

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September 2006

#### Abstract

Using a newly assembled data set on procedures filed in Mexican labor tribunals, we study the determinants of final awards to workers. On average, workers recover less than 30% of their claim. Our strongest result is that workers receive higher percentages of their claims in settlements than in trial judgments. We also find that cases with multiple claimants against a single firm are less likely to be settled, which partially explains why workers involved in these procedures receive lower percentages of their claims. Finally, we find evidence that a worker who exaggerates her claim is less likely to settle.

<sup>\*</sup>We thank Tatiana Carrera, Fernando Espino, Helena Garcia, Oscar Sanchez, Pedro Struck, Antonina Tarassiouk, Lorelen Urioste, and Carlos Zafra for research assistance. Financial support from the Asociación Mexicana de Cultura, the Conferencia Interamericana de Seguridad Social, and the Inter-American Development Bank is gratefully acknowledged.

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#### 1 Introduction

One of the major tenets of the field of law and economics is that the legal environment affects economic behavior and outcomes. In studying the legal environment, it is crucial to distinguish between the letter of legal rules and their application or enforcement. Much of the evidence we have on how private law is enforced comes from legal disputes between private parties. The empirical analysis of legal disputes has focused disproportionately on cases litigated at trial, since almost all available data is on trial outcomes. However, filed cases are not a random sample of the universe of underlying legal disputes, and cases litigated at trial are not a random sample of those filed.

The literatures on law and economics have examined many areas of dispute resolution, including such topics as litigation, arbitration, settlement, and the selection of cases for trial. A key limitation of the empirical tests of theories in this literature has been the lack of data on settled legal disputes. We exploit the fact that Mexican labor law obliges parties in employment disputes to seek ratification of settlements, and also mandates that courts approve and record the details of settlements of filed lawsuits. We use a data set from labor tribunals in Mexico that provides extensive information about settled cases as well as tried cases in order to address a few of the major testable implications of arbitration and litigation theory.

Our data analysis has yielded several interesting findings. First, lawsuits that go to trial receive significantly lower final payments. Second, final-payment amounts are lower when several workers are grouped in a case against a single firm, and these cases settle with lower probabilities. Finally, we find evidence that workers who exaggerate their claims settle less often, and may be punished in terms of final-payment amounts. These results have important implications for many of the theoretical models proposed in the literature.

The paper is organized as follows. Section 2 reviews previous theoretical and empirical work in the areas of arbitration, litigation, and settlement. Section 3 explains the relevant details of the legal environment, namely Mexican labor law relating to the type of lawsuits we examine, as well as rules governing the labor courts in Mexico. Section 4 describes the information available in the data set we use. Section 5 presents our statistical analyses. Section 6 concludes and relates our results to the broader literature.

#### 2 Previous Work

This paper is related generally to the literature on bargaining and dispute resolution, and more specifically to the work on arbitration and litigation. The usual framework in this area is a game theoretic model in which parties decide whether to settle a dispute privately or bring it before an adjudicator, which could be an arbitrator or a court. In an environment with complete information and costly adjudication, all disputes would terminate in private settlement. Hence the fact that a small but significant proportion of disputes do not settle can only be

explained in the context of an incomplete information model. Assuming that settlement negotiations are less expensive than litigating the dispute to a final resolution, parties will settle all disputes privately unless they hold sufficiently different beliefs about the expected benefits of going to court.

Differing beliefs can arise in two ways. On the one hand, the parties may have ex-ante asymmetric information, *i.e.*, one of the parties has superior knowledge about the merits of dispute and the likelihood of prevailing in an adjudicated award. On the other hand, parties may have ex-ante symmetric information about the merits of the dispute, but after the case is filed they may observe different signals of the probability of prevailing in court. This gives rise to differing posterior beliefs about the expected benefits of continuing the litigation rather than settling. If based on these posterior beliefs opposing parties are each relatively too optimistic about the expected benefit of going to court, they will fail to reach a settlement. Both information structures, ex-ante asymmetric information and ex-ante symmetric information with differing posterior beliefs, can result in systematic differences between the average underlying merits of disputes that are settled out of court and disputes that proceed to binding adjudication.

A sizeable theoretical literature has focused on explaining why settlement negotiations fail in a significant proportion of legal disputes and on characterizing the selection effect of going to court. However, the lack of information on settlement amounts in most litigation data sets has been a major obstacle to testing and measuring the differences in success rates and compensation amounts between settled and tried disputes. Our data set provides an almost unique opportunity to test and measure differences between the outcomes of settled and tried lawsuits that result from firing disputes. To provide background for what we do, in this section we review several models in the literature, discuss their testable implications, and summarize empirical work testing those implications.

P'ng (1983) proposes one of the early models of litigation under asymmetric information. He assumes risk-neutral parties and one-sided asymmetric information, along with an exogenously set settlement amount. In the Nash equilibrium of this game the informed party cannot reveal its private information in its settlement offer, because this would allow the uninformed party to perfectly predict the potential trial outcome. Therefore the average quality of cases that settle need not differ from that of tried cases.

Bebchuk (1984) extends P'ng's analysis by allowing the settlement amount to be chosen by the parties. In this model the uninformed party (the plaintiff) makes a take-it-or-leave-it settlement offer to the defendant. In equilibrium the settlement offer made by the plaintiff induces defendants who are relatively likely to lose in court to settle, while defendants who are relatively likely to win refuse to settle and go to court. Hence the quality of cases that settle is higher, on average, than that of cases that go to court. Bebchuk also studies the effects of increasing the stakes in the case, *i.e.*, the potential judgment against the

<sup>&</sup>lt;sup>1</sup>With the introduction of judicial error P'ng's model yields some equilibria in which the informed party's information is revealed, but the equilibrium with no information revelation continues to exist.

defendant. He finds that as the stakes increase, the probability of settlement falls and settlement amounts increase. Nalebuff (1987) points out that Bebchuk's results depend on an assumption that the plaintiff's threat of going to court is always credible. Once this assumption is relaxed, Bebchuk's result on the effects of increasing the stakes can be reversed. As the likely judgment at trial increases (stakes increase) the credibility constraint of the plaintiff may be relaxed, making her act less aggressively in settlement negotiations, and increasing the likelihood of a settlement.

Spier (1992) also assumes risk-neutrality and one-sided asymmetric information, but models the dynamics of settlement explicitly. Given an exogenously set trial date and a finite number of rounds of settlement offers up to that date, she finds a U-shaped pattern of settlement, so that the probability of settlement is higher at the beginning of negotiations and close to the trial date. Fenn and Rickman (1999) use a data set containing negligence claims against NHS trusts in England to test Spier's model of delay in settlement. They estimate the conditional probability of case settlement and test the effects of changes in legal costs and levels of uncertainty on the probability of settlement.

Eisenberg and Farber (1997) assume an underlying distribution of litigation costs for potential litigants, and consider the effects of changes in this distribution on rates of settlement and success at trial. They show that as the variance of potential plaintiff's trial costs increases, the rate of settlement decreases and the success of plaintiffs at trial falls. They test this result using data from civil suits in federal district courts, and find that individuals, who have a more variable distribution of litigation costs than corporations, are less likely to settle as plaintiffs and also less likely to win at trial.

Sieg (2000) uses data on medical malpractice suits in Florida to estimate an asymmetric information model similar to Nalebuff's. The data provide information about whether the dispute settles or not, as well as the amounts of compensation paid in court and in a settlement. He finds that the asymmetric information model can explain most observed empirical facts, in particular the fact that on average plaintiffs who settle receive a higher level of compensation, while those who do not settle receive a higher level of compensation if they win the case, but are very unlikely to win in court.

Farmer and Pecorino (2004) use a data set on final offer arbitration in Major League Baseball that contains information on offers from both parties, actual salary earned by the player after the arbitration process, and various statistics pertaining to the player's market value. They find that players who exaggerate their claims, by demanding a salary above their predicted market value, are more likely to reach the final stage of arbitration, and more likely to earn a lower ex-post salary. They conclude that these results are inconsistent with a bargaining model in which the player has private information about some unobservable characteristic related to risk preferences or future market value. In such a model, players who exaggerated their salary demands would tend to be those whose true market value exceeded the predicted market value from publicly available information, and therefore would tend to earn higher salaries after the conclusion of the arbitration process.

Models with symmetric information can be divided into two broad categories. The first category includes models of arbitration that typically assume symmetric information between the parties to a dispute and model the behavior of an arbitrator who has less information about the dispute than the parties. The second category includes models of litigation in which excessive optimism is the rationale for some disputes going to court.

Gibbons (1988) models the decision of an arbitrator under both conventional and final-offer arbitration structures. The parties to the dispute observe equally noisy signals about the underlying merits of their dispute. The arbitrator observes a different and noisier signal; both parties know the distribution of the error in the arbitrator's signal but do not observe the signal directly. In equilibrium, the arbitrator learns from parties' offers and computes her ideal arbitration award, which is a function of the signal and of the average of parties' offers. When parties' offers differ more, these offers provide less precise information to the arbitrator and their average is assigned relatively lower weight in the arbitrator's ideal award.<sup>2</sup> Also, as the parties' information about the case becomes relatively more important than publicly available information, the award places relatively higher weight on the average offer.

This decision rule is consistent with empirical evidence on the effects of parties' offers and arbitrators' awards. Farber and Bazerman (1986) study the arbitration decisions of the National Academy of Arbitrators in 25 cases. They find that arbitrators placed relatively more weight on the known facts of the cases than on the offers made by the parties to the dispute, and placed less weight on parties' offers as they diverged more. This is consistent with the notion that an arbitrator who mechanically splits the difference between parties' offers will provide incentives for the parties to take unreasonable or extreme positions. Rather than mechanically splitting the difference, if an arbitrator responds to extreme positions by placing less weight on parties' offers, parties have incentives to submit more reasonable offers.

Boden (1992) works with data from 204 disability claims in Maryland, and estimates the adjudicated award as a function of the disability ratings proposed by the physicians of the claimant and the defense, as well as other known facts about the claimant and the injury. He finds that few facts relating to the case add explanatory power to the prediction of the adjudicated award, after including the parties' positions. Using data on settled claims, he finds that when parties settle they place even less weight on the facts of the case than an arbitrator would, so that the compensation paid is practically always the average of the parties' offers. Moreover, Boden finds that as parties' positions become more disparate, both adjudicated awards and settlements continue to place a large weight on the offers. Nevertheless, the data imply that physicians tend not to submit wildly different positions, perhaps because of reputation considerations, or because adjudicators would ignore physician's ratings that

<sup>&</sup>lt;sup>2</sup> Given a signal of the underlying facts received by the arbitrator and a position taken by the opposing party, the more aggressive a party's offer is, the lower the weight it will receive in computing the arbitrator's award, and the less likely it is to be chosen as the award under final-offer arbitration.

clearly contradicted known facts about the injury.

Priest and Klein (1984) propose a non-strategic model of the decision to settle a case, and focus on the selection effect of settlement. They show that under several assumptions the win rate for plaintiffs and defendants should tend to 50%, regardless of whether the law favors plaintiffs or defendants. They assume risk neutral parties that sue to decide a discrete issue<sup>3</sup> with equal stakes. The parties have incomplete but symmetric information as to the merits of the case, and once a case goes to court, the judge observes the true merits and applies clear legal rules at judgment. Each party observes a noisy signal of the merits of the case, estimates her probability of winning at trial, and decides on a range of settlement amounts that would keep her out of court. Parties settle when their respective ranges of settlement amounts overlap. Priest and Klein show that as parties' signals become more accurate, cases that are litigated have fact patterns arbitrarily close to the legal cutoff for liability, and the plaintiff win rate therefore tends to 50%. In addition, as parties observe almost perfect signals of the merits of the case, the settlement rate should increase so that very few cases are litigated. Hence, the smaller the percentage of litigated cases, the closer to 50% is the win rate at trial.

Many studies attempting to test the Priest-Klein result have been unable to verify the 50% win rate for plaintiffs.<sup>4</sup> However, the assumptions of the model are quite restrictive, and some are impossible to verify empirically. Hence it is difficult to tell what causes a deviation from the 50% win rate, and such evidence cannot be used to assert that the original case selection theory is incorrect.<sup>5</sup> Testing settlement behavior is generally difficult because very few data sets have information on pretrial negotiations and on settlement amounts. In fact, in many legal systems out-of-court settlements are generally confidential and this may be an important reason for parties to reach a settlement.<sup>6</sup> Here we discuss a few important empirical tests of case selection theory.

Fournier & Zuehlke (1989) use data from civil cases filed between 1979 and 1981, and observe whether the case settles or not (but not settlement amounts) as well as some characteristics of trial awards and plaintiffs' claims. They find that a higher variance of trial awards increases the probability of reaching a settlement. Although a higher variance of trial awards should increase the likelihood of the parties disagreeing on trial award predictions, it also increases the incentives of risk averse parties to settle. This empirical evidence suggests that the latter effect is stronger, so that more uncertainty about trial outcomes promotes a higher settlement rate.

<sup>&</sup>lt;sup>3</sup> For example, the parties in the original case selection model do not litigate the amount of damages that should be paid, but rather a single issue such as whether the defendant is negligent or not.

<sup>&</sup>lt;sup>4</sup> Kessler, et. al. (1996) provide an overview of several articles that found plaintiff success rates significantly different from 50%.

<sup>&</sup>lt;sup>5</sup> This argument is made by Gross and Syverud (1991).

<sup>&</sup>lt;sup>6</sup>Gross and Syverud (1991), for example, study cases that proceeded to trial, but are able to obtain data on the best offer received by the plaintiff in pre-trial negotiations. See Daughety and Reinganum (1999) for an extensive discussion and analysis of the confidentiality of settlements.

Gross & Syverud (1991) study 529 California civil jury trial cases in various areas of law. They observe settlement offers and judgments for cases that go to trial, but have no information on cases that settle. They find that the plaintiff win rate varies greatly across case types (e.g., personal injury vs. commercial transactions). When plaintiffs pay their own litigation costs, the settlement rate increases and the plaintiff win rate at trial increases, indicating that higher quality suits are brought on average when plaintiffs must shoulder costs of filing and trial. Asymmetric stakes (such as repeat players on one side) cause the settlement rate to decrease and the win rate for the high-stakes player to increase. This could imply that high stakes litigants seek to establish a tough reputation by going to trial more frequently and exerting more effort to win cases at trial. Finally, they find that in cases with high potential damages and rich defendants, the plaintiff success rate at trial decreases; this may be evidence that lower quality suits are brought when defendants are richer and potential damage awards higher.

Siegelman & Donohue (1995) examine employment discrimination cases and find a plaintiff win rate well below 50%. They use the business cycle to verify implications of the case selection hypotheses. As macroeconomic conditions become more adverse, they show that the number of lawsuits filed increases, there is a higher settlement rate, and plaintiffs tend to lose more often at trial. This indicates that on average the quality of cases filed worsens with economic conditions, and that the selection effect weeds out many but not all of the low-quality cases.

Waldfogel (1995) develops the implications of the Priest-Klein model to show that the relationship between the settlement rate and the rate of plaintiff wins at trial depends on the relative cost of going to trial as opposed to settling, the position of the decision standard used by the court with respect to the distribution of parties' behavior, and the variance of the error in the signals parties receive about the merits of the case. Using data from federal civil cases in the Southern District of New York which are assigned randomly to judges in the jurisdiction, he is able to identify the effect that the judge (who affects the decision standard and the level of uncertainty faced by the parties) has on the relationship between the rate of settlement and the likelihood of plaintiff prevailing in court. He finds a strong relationship between the rate of settlement and plaintiff's win rate, and significant variation across judges in both, especially in disputes for which the law is perceived to be less clear.

Although this paper does not test a specific economic model rigorously, we do feel it is useful to summarize some of the important implications of the theoretical models described above. The following three issues form the focus of our empirical exercises:

- 1. Settlement amounts may differ on average from judgment amounts.
- 2. Repeat players (those with higher stakes) may act differently in the bargaining and trial process, possibly generating differences in settlement rates and final awards.

3. The "quality" of cases that are settled may differ systematically from the "quality" of cases that go to trial.

Despite the fact that these three hypotheses have played prominent roles in the theoretical literature, data constraints have made them quite difficult to address empirically. As described in the next section, institutional features of the labor-courts system in Mexico provide us with a unique opportunity to examine these issues empirically.

#### 3 Legal Environment

Mexican labor law regulates many aspects of the employment relationship.<sup>7</sup> For the purposes of this paper, the most relevant rules concern the provision of fringe benefits, overtime, and the mechanics of firing. Fringe benefits are mainly composed of vacation time and pay and an end-of-year bonus. Each employee is entitled to a certain number of days of paid vacation depending on tenure at the firm. The worker must also be given a vacation bonus, so that she earns 125% of her salary during each day of vacation.<sup>8</sup> Also, every employee is entitled to an end-of-year bonus of at least 15 days' wages.<sup>9</sup>

A normal work-week cannot exceed 48 hours. If an employee works more than 48 hours, she is entitled to overtime pay. The law mandates double pay for up to 9 hours of overtime, and triple pay for any hours above 57 per week.<sup>10</sup>

Firing is classified under the law as justified or unjustified. Justified firing is limited to wrongdoing on the part of the worker. For example, an employer may justifiably fire a worker for three unexplained absences from work during one month, 11 or for deliberately or negligently damaging the employer's machinery. Firing for other reasons, such as low worker productivity, or layoffs during a recession, is considered unjustified and implies a much higher firing cost. 12

For either type of firing, the firm must cover all payments owed to the worker up to the firing date, including overtime, unpaid end-of-year bonuses, as well as the percentage of the worker's fringe benefits that corresponds to the proportion of the last year in which the worker was employed. Additionally, the worker is entitled to severance pay equivalent to 12 days' wage for each year worked, with wage/day capped at twice the minimum wage.<sup>13</sup>

At the time of firing the firm must notify the worker of the exact cause of

<sup>&</sup>lt;sup>7</sup> All regulations discussed here apply primarily to workers in the formal sector, which covers only around 60% of the Mexican work force. Informal workers can obtain some benefits from the labor law, but must be able to prove the existence of an employment relationship as well as facts about the employment contract.

<sup>&</sup>lt;sup>8</sup> Articles 76 and 80, Ley Federal del Trabajo (LFT).

<sup>&</sup>lt;sup>9</sup> Article 87, LFT.

 $<sup>^{10}\,\</sup>mathrm{Articles}\ 66\text{-}68,\,\mathrm{LFT}$ 

<sup>&</sup>lt;sup>11</sup> Nevertheless, "unexplained absence" is not defined in the LFT, and anecdotal evidence suggests that is it quite difficult for employers to fire their workers on this basis alone.

<sup>&</sup>lt;sup>12</sup> Article 47, LFT.

 $<sup>^{13}</sup>$  Article 162, LFT.

firing as defined by the *Ley Federal del Trabajo* (LFT),<sup>14</sup> often leading to a suit in which the worker disputes the firm's statement of cause. In all lawsuits related to firing, the firm carries the burden of proving that it fired the worker for just cause.<sup>15</sup>

For unjustified firings, which under the LFT constitute the vast majority of worker-job separations, the firm incurs much greater costs. To begin with, a worker who proves that she was fired without justification can ask to be reinstated in her job. <sup>16</sup> For the majority of workers, the letter of the law indicates that unless the firm can prove justification for firing, it cannot defeat the work's plea for reinstatement. <sup>17</sup> The firm may only refuse to reinstate for certain categories of workers mainly including temporary workers, those with less than one year's tenure, and workers considered to be at-will employees under Mexican law. <sup>18</sup>

Besides the payments owed to all workers separated from their jobs, all workers fired unjustifiably are owed two types of payments. First, they receive back pay including benefits covering the period between the date they were fired and the date at which the court's decision in the lawsuit is executed. Second, they receive three months' salary with benefits. In addition, those workers for whom the firm can refuse reinstatement are entitled to 20 days' wage plus benefits for each year worked, without any cap on the wage rate. <sup>19</sup>

Reducing a worker's nominal wage is legally equivalent to an unjustified firing.<sup>20</sup> A worker whose wage is reduced may force the firm to give her full severance pay, including back pay, three months' salary, and 20 days' wage per year worked, even if the worker is not an at-will employee.<sup>21</sup>

A firm may also avoid having to reinstate workers it fires without just cause in the case of layoffs that are warranted given the economic situation of the firm.<sup>22</sup> A layoff is defined as a proceeding which the firm initiates before the labor courts, submitting proof including expert testimony in relation to the firm's economic position and the economic situation of the industry. The labor court

<sup>&</sup>lt;sup>14</sup> The worker is to be informed in writing of the cause of firing. Failure to notify in writing and in a timely fashion implies that the firing is considered unjustified under Mexican labor law, regardless of the underlying cause. Article 47, LFT.

<sup>&</sup>lt;sup>15</sup> Article 48, LFT.

<sup>&</sup>lt;sup>16</sup> In case the worker is reinstated, she receives only back-pay plus fringe benefits for the period of time from firing to reinstatement. Article 48, LFT.

<sup>&</sup>lt;sup>17</sup> Considering that low worker productivity is not a valid cause to for firing, the right to demand reinstatement probably constitutes a large firing cost for employers, regardless of explicit monetary firing costs. Interestingly, in our data we find very few reinstatements. This does not, however, imply that the right to request reinstatement does not affect the bargaining power of workers.

<sup>&</sup>lt;sup>18</sup> At-will employees - so called *trabajadores de confianza* - include two quite diverse types of employees. On the one hand they include managerial employees, such as supervisors, managers, directors, inspectors, and accountants, and on the other hand they include employees whose job implies direct contact with the employer, such as personal staff (for example secretaries). Article 49, LFT.

 $<sup>^{19}</sup>$  Articles 48 and 50, LFT.

<sup>&</sup>lt;sup>20</sup> Article 51-IV, LFT.

 $<sup>^{21}</sup>$  Article 52, LFT.

<sup>&</sup>lt;sup>22</sup> Article 434-II, LFT.

must then conduct a public hearing in which workers and their representatives, including unions, can participate, as well as the firm's experts and experts appointed by the court. After this hearing the labor court declares whether the firm can lay off workers. If so, the firm avoids having to reinstate any workers laid off, and need not pay workers the additional 20 days' salary per year worked, although it must still pay three months' wages.<sup>23</sup>

Finally, a few words about the labor tribunals we study are in order.<sup>24</sup> Labor courts in Mexico (called *Juntas de Conciliacion y Arbitraje*) are in fact administrative courts that belong to the executive branch and enjoy limited independence from the Secretary of Labor. As their name suggests, these tribunals play the role of conciliators as well as adjudicators. Their organic statute mandates at least one conciliation hearing before proceeding to try a case. Federal labor courts have jurisdiction over all labor conflicts that involve a certain minimum amount in dispute in a wide range of industries.<sup>25</sup> Among the federal tribunals, jurisdiction is determined by industry.

Although the labor law openly promotes settlement of disputes, it takes an extreme position against the confidentiality of settlements. All settlements that are not ratified by the relevant tribunal are not binding, so that an employee cannot credibly promise not to pursue a suit against his employer unless their settlement is approved by the court. Hence a large part of the data comes from filed settlements rather than lawsuits: employers and workers very often jointly submit a settlement to the labor court simply to obtain the ratification that makes the agreement binding.

Once a lawsuit is filed, the tribunal with jurisdiction over the dispute schedules a conciliation hearing. If that hearing concludes unsuccessfully, the tribunal schedules subsequent hearings for the presentation of evidence and for trial; however, at any point during the process the suit can be terminated by settlement, again provided the tribunal approves the agreement. In the data there is little evidence that tribunals reject settlements, although the law gives them the prerogative to do so. The approval of settlements mainly serves as a mechanism for notifying the tribunal and making the agreement binding at law. In addition to ratifying both filed settlements and settled lawsuits, the tribunals must record details about the settlement, such as the date of the settlement and the amount paid.

<sup>&</sup>lt;sup>23</sup> Articles 900-919, LFT. In our sample we do not find any such layoff cases initiated by firms. However, we do find cases in which firms simultaneously fire large numbers of workers. Given how cumbersome and uncertain the procedure outlined in Articles 900-919 is, it is possible that firms almost never make use of the formal layoff procedure.

<sup>&</sup>lt;sup>24</sup> The following description of the rules governing the operation of the federal labor courts is based on Title 14 of the LFT.

 $<sup>^{25}</sup>$  Article 600-IV, LFT, and Reglamento de la Competencia de las Juntas Especiales que Integran la Junta Federal de Conciliación y Arbitraje. Labor law in Mexico is federal, and jurisdiction over labor disputes is not determined by geographic location of the dispute. The local juntas are bound by the same substantive law although they may use simplified procedures

#### 4 Data

We have assembled a data set comprised of a random sample of procedures filed between 1990 and 1998 in two tribunals in the Mexican federal labor court system. We sampled from tribunal 15, which covers the pharmaceutical, chemical, paper, automotive and auto parts industries, and from tribunal 6, which covers the textile industry. For tribunal 15, we randomly selected 150 case files from each year from 1991-1998, with the exception of the year 1992 from which we sampled 215 case files. For tribunal 6, we sampled 75 case files from each year from 1990-1997. The sampled 215 case files from each year from 1990-1997.

There are two main types of procedures: filed settlements and lawsuits. For filed settlements, there is only one statement of facts made jointly by the employer and the employee, and resolution of the procedure is always settlement. Lawsuits contain the employee's claim, the employer's answer (if the employer chooses to answer), the terms of settlement reached if the case settles, and the terms of the court's ruling if the case is not settled. Many suits include multiple plaintiffs and are treated as correlated data points in the statistical analysis. In this section we describe the main variables relating to the lawsuit, worker and employer information, and resolution of the conflict.

For all procedures filed in our sample, we observe the motive for filing,<sup>28</sup> the date of filing, the geographical location of the dispute, and whether the procedure is a settlement or a lawsuit. With respect to information collected from the worker's filing, we have information about the type of job held,<sup>29</sup> the date the job started and ended, the salary with and without fringe benefits, hours worked per week, the worker's demands,<sup>30</sup> as well as worker gender, date of birth, and sometimes the worker's social security ID number.<sup>31</sup> With respect to the worker's claims, we collect very detailed data that allow us to construct

<sup>&</sup>lt;sup>26</sup> These data were obtained by the authors using a new law governing freedom of governmental information in Mexico. Although some of the variables used in this study are considered to be public information under the law, other variables are not public information, and have been obtained under a confidentiality agreement between the Federal Labor Courts System and the authors.

 $<sup>^{27}</sup>$  For tribunal 15, the total number of case files was 973 in 1991, 951 in 1992, 1020 in 1993, 865 in 1994, 902 in 1995, 722 in 1996, 672 in 1997, and 795 in 1998. For tribunal 6, the total number of case files was 728 in 1990, 699 in 1991, 700 in 1992, 860 in 1993, 690 in 1994, 574 in 1995, 414 in 1996, and 403 in 1997.

<sup>&</sup>lt;sup>28</sup> Most procedures in our sample are related to a firing. A few suits do not dispute the firing decision but claim incomplete severance pay or incomplete payment of fringe benefits. There are also a few pension cases.

<sup>&</sup>lt;sup>29</sup> Although the claim specifies the actual job description, we only use this to classify workers as standard employees or as at-will (supervisory) employees, who are entitled to higher severance pay under the labor law.

<sup>&</sup>lt;sup>30</sup> In firing law suits, workers generally demand reinstatement, back-pay, overtime, fringe benefits, and severance pay.

<sup>&</sup>lt;sup>31</sup> The presence of the ID number allows us to link the data from the lawsuit to confidential data on the worker's employment records available from the Mexican social security administration. The latter data tell us the wage reported for the worker since 1985, as well as an identifier for the worker's employer, the industry and the location of the worker. For the present paper we have only used the social security data to verify wages reported in the lawsuits and to follow up on dropped cases.

three variables: the actual amount of money claimed by the worker, an imputed claim assuming the dismissal was unjustified but based only on statements that we believe are easily verifiable, and an imputed claim of what the law would assign to this worker given justified firing, again based on statements that we believe are easily verifiable.

In order to calculate our imputed claims we assume that the worker is accurately reporting certain "easily verifiable" features of the case such as the wage and the dates when the worker was employed. We ignore certain other claims such as having worked an extraordinary amount of overtime or never having received constitutionally-mandated benefits despite the fact that the worker could have demanded these benefits prior to the current lawsuit.

For the employer we have a firm identifier, the location of the business, and the industry. In lawsuits to which the employer provides an answer, we also have the employer's version of the facts cited by the worker in her claim, such as the worker's job description, salary, and so on. Additionally we code other evidence submitted by the firm to establish that the worker was never hired or fired, was fired with some justification, <sup>32</sup> has received fringe benefits payment, or has already accepted a severance package from the firm.

In terms of the procedures' outcomes, as explained before, a substantial proportion of the procedures filed arrive to the tribunals as a settlement, and are always ratified by the courts as such. For lawsuits, we observe three types of conclusions: dropped suits, settlements, and trials leading to a judgment by the court. We record the date of conclusion of the procedure, the payment received by the worker, and any previous payments recognized by the court. For trials, we observe a trial result stated by the court, <sup>33</sup> the votes of the parties in favor of or against the judgment, <sup>34</sup> the facts of the case as recognized by the judge, the number of constitutional appeals filed, <sup>35</sup> and the number of judgments made by the court.

### 5 Statistical Analysis

In this paper we do not analyze procedures that arrived to the court with the worker and the firm already agreeing on the final resolution. In addition, we limit our analysis to lawsuits related to firing. These constitute the vast majority of lawsuits in the database.

 $<sup>^{32}</sup>$ In cases where the firm alleges having fired the worker justifiably, it provides evidence of one of the causes for justified firing described in the law.

<sup>&</sup>lt;sup>33</sup> The court states whether its decision is in favor of the worker's claim, the employer, or mixed, in the sense that the judge concedes only part of the claim.

<sup>&</sup>lt;sup>34</sup> In order for a final judgment to be valid, at least one of the parties must 'vote' in favor of it, so that along with the court's vote they constitute a majority. We rarely find both parties to a conflict voting in favor of the judge's resolution.

<sup>&</sup>lt;sup>35</sup> In cases that proceed to a trial, it is common for one or both parties to file constitutional appeals, generally claiming violations of due process. For each successful appeal filed, the court must issue a new judgment, so that in some cases we observe several decisions by the court.

We first report descriptive statistics of lawsuits in our sample. We then present kernel-density estimations that show the distribution of awards and the relationship between awards and claims. Finally we describe our econometric results, which present a story consistent with the intuition provided by the descriptive statistics and by the kernel-density graphs.

Table 1 reports how lawsuits are resolved. Around 70% of lawsuits are settled, and among the 30% that are not, slightly more than half are dropped and slightly less than half go to trial. We find quite similar results in the two tribunals we study. Table 1, like all tables in the paper, is calculated using the inverse of the ex-ante probability of a lawsuit being included in the sample as weights. This is done to approximate what we would have estimated if we had collected data from a census of lawsuits from each tribunal. This weighting procedure essentially adds more weight to lawsuits in years with more total lawsuits, since each sampled lawsuit in these years "represents" a larger number of lawsuits.

Table 2 shows summary statistics for several variables, including the award received by the employee. All monetary variables are converted to their equivalent value in December 1998 pesos. The employee's claim simply measures the amount of money requested by the plaintiff in the lawsuit. We also include our two imputed claims, that is, what Mexican labor law would award to the worker based only on facts of the case that are verifiable relatively easily such as dates worked and salary. Based on these easily verifiable facts, the first estimation assumes the worker was fired without justification, while the second assumes that the worker was fired with justification. Finally we report the percentage of the claim obtained by the employee. Note that employees receive substantially less than they ask for, in particular, we do not find that they receive on average half of what they request, as the literature on arbitration might suggest. Bearing in mind that when firms answer the lawsuit they often acknowledge some positive amount of money owed to the worker, the amount obtained by workers is far from what "splitting the difference" would suggest.<sup>36</sup>

Tables 3, 4, and 5 show the same summary statistics on amounts claimed and amounts awarded for lawsuits that are settled, tried, and dropped respectively. Although we will undertake more formal analyses later in this section, we believe it is useful to begin with simple comparisons of means.

Comparing tables 3 and 4, we see some interesting differences between lawsuits that end up being settled and lawsuits that go to a final judgment. First note that, in both tribunals, workers receive a higher percentage of what they ask for in lawsuits that are eventually settled. In both tribunals, our imputed claims of what the worker is entitled to based on relatively easily verifiable facts is higher in lawsuits that eventually settle than in lawsuits that do not settle. Worker claims as a percentage of our imputed claims, however, are larger in

<sup>&</sup>lt;sup>36</sup> Notice that average award is less than 10% of average claim in one tribunal, and around 23% in the other. However, the average percentage obtained by the worker is closer to 30%. This difference arises because the percentage statistic computes the average of the percentage that each worker obtains of his claim, rather than the average award divided by the average claim.

lawsuits that end up going to a final judgment. In fact, we see in the tribunal 15 that, despite the fact that our imputed claims lead us to believe that the lawsuits that end up being settled are "stronger" cases for the workers, the workers in this tribunal ask for more in lawsuits that go to final judgment. Taken together, these results suggest that the lawsuits that get settled are the ones in which the worker is asking for a payment that is more in accordance with a conservative reading of Mexican labor laws.

We see from table 5 that dropped lawsuits typically involve claims that dispute significant amounts of money. In both tribunals, for instance, the workers' claims in lawsuits that eventually get dropped are higher than the averages for all cases. In tribunal 15, our imputed claims of what the worker is entitled to based on easily verifiable facts is also higher for dropped lawsuits than for all lawsuits.

One might worry that these dropped lawsuits really represent ones in which the firm rehires the worker to convince the worker to drop the case. If this were true, these dropped lawsuits might cause serious econometric concerns. We would not observe any monetary award for the plaintiff, but in reality the worker might have received substantial compensation.

To evaluate the potential severity of this problem, we examined those workers for whom we observe a social security ID number. In tribunal 15, we observed 20 workers who dropped their lawsuits, 4 of whom we observed to be working at the same firm after the lawsuit was dropped. For settled lawsuits (again for those workers for whom we observed the social security number) only 2 out of 99 workers were observed at the same firm after the lawsuit was settled. For lawsuits that went to trial, 3 workers out of 47 were observed at the same firm after the lawsuit ended. Unfortunately, sample sizes were too small to do meaningful comparisons in tribunal 6.

Our interpretation is that the majority of dropped lawsuits are workers who simply gave up and received no compensation. Nevertheless, there is some evidence that dropped lawsuits might in some cases be successes for the workers. For this reason, we estimate models in which dropped lawsuits are included and treated as if the worker received nothing and we estimate models in which dropped cases are excluded from the analysis.

We now turn to our graphical analyses. Figure 1 shows a kernel-density estimate of the distribution of the log difference between the amount the worker asks for and the amount the worker receives for tribunal 15.<sup>37</sup> Note first that the majority of the distribution lies in the negative region of the figure, indicating that nearly all workers receive less than they demanded. Also note that the distribution is bimodal. We interpret the bimodal feature of the distribution as evidence that the worker either "wins" or "loses."

Figure 2 does the same exercise for lawsuits that reach a final judgment, that is, for lawsuits that are not settled and are not dropped. Once again we see a bimodal distribution. Note that in this figure the "worker wins" spike gets smaller and the "worker loses" spike gets bigger. These results are suggestive

<sup>&</sup>lt;sup>37</sup> When the worker receives zero, we set the log of the payment equal to zero.

that workers do relatively poorly in lawsuits that reach a final judgment. Figure 3 offers further evidence by examining lawsuits that eventually get settled. Note that this distribution is unimodal and that the spike of the distribution lies approximately where the "worker wins" spike lies in the previous figures.

Figures 4-6 are analogous to figures 1-3 but use data from tribunal 6. Once again the overall distribution is bimodal, and once again lawsuits that reach a final judgment seem to give the workers a lower percentage of what they ask than do cases that get settled. We now turn to the econometric section of the paper where we will further bolster the above claims and undertake additional analyses.

Table 6 reports the results of econometric models estimating the determinants of the log of the final award. We present Tobit models in which awards of zero are treated as censored observations, as well as least squares models in which we set the log award equal to zero when the actual award was zero. The key independent variables are the log of the worker's claim as well as a dummy for whether the case ends in a ruling by the judge. We also include dummy variables for the quarter in which the worker leaves the firm (32 dummies). Our models allow for the possibility of heteroscedasticity and allow for a correlation of outcomes when we observe multiple plaintiffs in the same case file against the same defendant. We estimate these models separately for each tribunal and estimate them separately both including and excluding dropped cases from the analysis.

Two main results emerge from table 6. First, and not surprisingly, lawsuits in which the worker asks for more money tend to pay the worker more money. More interestingly, lawsuits that reach a final judgment pay substantially less than cases that do not reach a final judgment. This is a particularly interesting result when we include dropped lawsuits in the analysis, noting that all dropped lawsuits involve no payments at all. We emphasize the fact that the terms of settlement are typically not observed in data sets of this nature. Few empirical studies can compare the award amounts between lawsuits that reach a final judgment and those that do not.

Table 7 adds an additional independent variable that we believe is interesting. We include a dummy variable indicating whether the plaintiff is involved in a lawsuit that is grouped together with other plaintiffs against the same firm. These estimations may shed light on game-theoretic models involving repeat players. When the firm is taking its decision with regard to one plaintiff, the firm must take into account any inferences the other plaintiffs might make about the firm's willingness to be aggressive.

We see from table 7 that, when we include dropped lawsuits in the analysis, lawsuits involving multiple plaintiffs tend to pay less to the workers. We see no such evidence, however, when we exclude dropped lawsuits. One wonders, however, whether it is appropriate to control for the mode of termination of the lawsuit. If one believes that a firm would act more aggressively in lawsuits involving multiple plaintiffs, the effects on award amounts might work through the differences in settlement probabilities.

Table 8 investigates this possibility by estimating similar models, without

controlling for mode of termination. The results for tribunal 15 now indicate that lawsuits involving multiple plaintiffs pay less to the worker, whether or not dropped lawsuits are included in the analysis. Results are similar but weaker, however, in tribunal 6; results are statistically insignificant when dropped lawsuits are excluded.

Table 9 presents further evidence on this issue by examining the determinants of the mode of termination. When dropped lawsuits are included in the analysis, we estimate separate logit models for the three possible modes of termination. When dropped lawsuits are excluded from the analysis, we estimate one logit model of the probability of settlement. We control for the worker's claim at the time of the filing of the lawsuit and include a dummy variable indicating whether the lawsuit involved multiple plaintiffs in the same case file.<sup>38</sup> In both tribunals, whether or not we exclude dropped lawsuits from the analysis, cases are less likely to be settled when they involve multiple plaintiffs.

Thus far we have not exploited our imputed claims of what the worker would be entitled to given the easily verifiable facts of the case. In table 10, we return to our models of award amounts by adding the log of our imputed claim, assuming the dismissal was not justified. Note that, in all models, the workers claim ceases to be statistically significant. In many models, our imputed claim is a statistically significant predictor of the award amount. We interpret this result as evidence that "outrageous" claims are not rewarded.

In table 11, we estimate the same models as in table 10, but without controlling for mode of termination. If an exaggerated claim affects the probability of the mode of termination, excluding mode of termination may be a better way of estimating the overall effect of an exaggerated claim. After controlling for the log of our imputed claim, the coefficient on the log of the total claim is negative in all models and statistically significant when dropped cases are excluded. That is, we find some evidence that workers are actually punished for exaggerating their claims.

To further address the point on how an exaggerated claim might affect the mode of termination, we return to logit analyses of the mode of termination in table 12. We include an additional control variable of the log of the ratio between the worker's claim and our imputed claim assuming an unjustified dismissal. In both tribunals, whether we include dropped lawsuits in the analysis or not, we find that cases involving "excessive" worker claims tend not to be settled.<sup>39</sup>

Overall, tables 10-12 present an interesting story. Some workers exaggerate their claims more than others. Additionally, workers who exaggerate their claims settle less often, presumably because they are either aggressive by nature or because they incorrectly estimate the strengths of their cases. In any event, the courts are not fooled be these exaggerated claims. In fact, the courts may

<sup>&</sup>lt;sup>38</sup> The worker's claim normally increases over time since "lost wages" continue to accumulate. We do not allow for this claim to increase over time in the logit models of mode of termination to avoid endogeneity problems. We also control for dummy variables for the quarter in which the worker left the firm (32 dummies in total).

<sup>&</sup>lt;sup>39</sup> Adding the worker's claim to these models yields insignificant coefficients and does not change the main results

punish workers for exaggerating these claims.

#### 6 Conclusions

Motivated by the previous theoretical and empirical literatures on the resolution of legal disputes, we use data from labor tribunals in Mexico to address three empirical issues. First, we compare final payments in cases that are settled to those in cases that go to trial, a comparison which is relatively rare in this literature since settlement amounts are rarely observed. Second, we address differences between "high-stakes" players and others by examining differences between firms involved in cases involving multiple workers compared to firms in cases involving a single worker. Finally, we examine whether tried cases tend to be of higher or lower "quality" by examining workers who are apparently exaggerating their claims.

Perhaps our strongest result is that final payments to workers are significantly lower in cases that go to trial compared with cases that settle. We also find that firms involved in cases with multiple workers (firms with higher stakes) tend to settle less and make lower final payments to their workers. Finally, we find that workers who exaggerate their claims settle less often and may be punished for such exaggeration in the final award amounts.

We conclude by placing our results in the broader literature. Several theoretical models imply that final payments may be different in settled cases compared with tried cases due to a selection effect of going to trial. We do find substantial differences in final payments between cases that are settled and cases that go to trial. In fact, we find direct evidence of a case-selection effect by showing that workers who exaggerate their claims (and therefore have weaker cases) tend to settle less often.

Our results on firms involved in cases against multiple workers are also relevant for theoretical models involving repeat players or "high-stakes" players. These models predict that firms should be concerned about how their current actions affect their reputations. These firms should therefore be more aggressive in negotiations and should exert more effort at trial. Our results that firms involved in cases with multiple plaintiffs settle less often and end up making lower final payments are consistent with these theoretical predictions.

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Figure 1: Kernel Density Estimate of Log Difference Between Claim and Payment: Tribunal 15

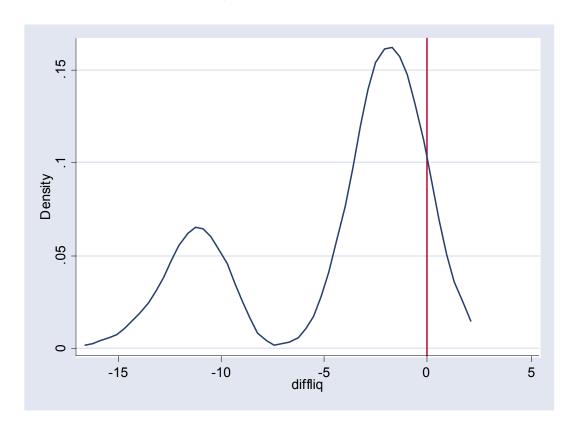


Figure 2: Kernel Density Estimate of Log Difference Between Claim and Payment: Tribunal 15 (Judges' Rulings Only)

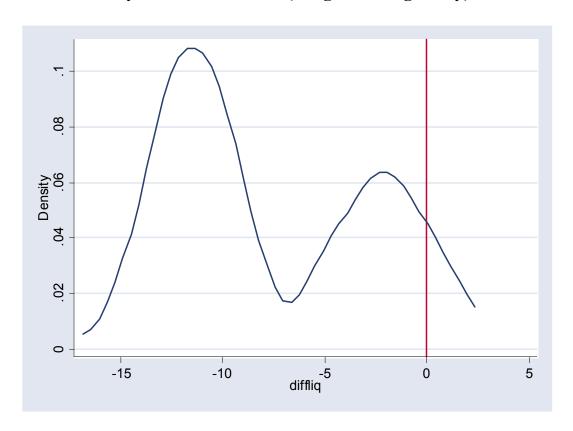


Figure 3: Kernel Density Estimate of Log Difference Between Claim and Payment: Tribunal 15 (Settlements Only)

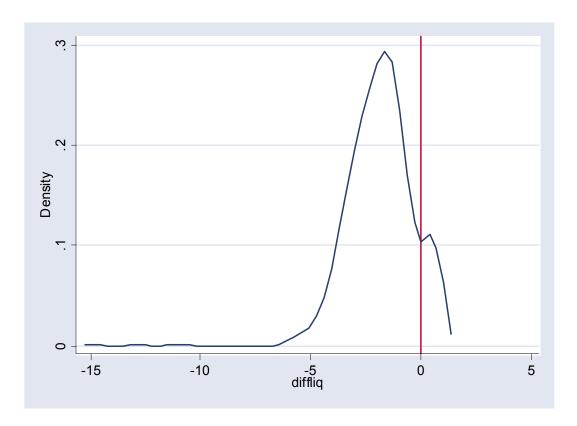


Figure 4: Kernel Density Estimate of Log Difference Between Claim and Payment: Tribunal 6

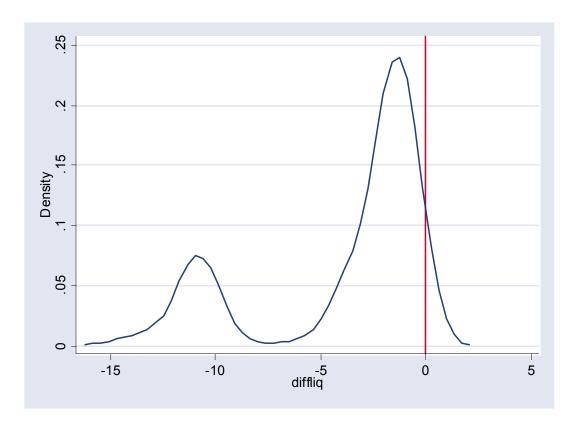


Figure 5: Kernel Density Estimate of Log Difference Between Claim and Payment: Tribunal 6 (Judges' Rulings Only)

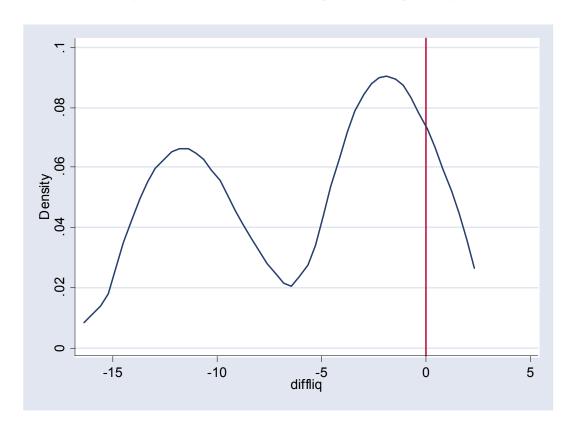
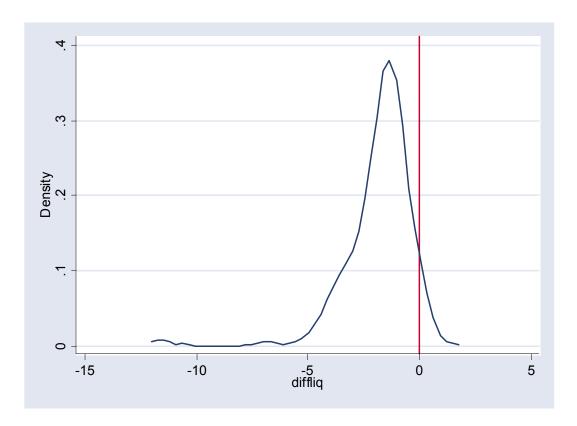


Figure 6: Kernel Density Estimate of Log Difference Between Claim and Payment: Tribunal 6 (Settlements Only)



**Table 1: Resolution of lawsuits** 

	Tribunal 15	Tribunal 6
	(n = 1076)	(n = 547)
% Settled	67.6	70.5
% Tried	14.4	13.6
% Dropped	18.0	15.9

Table 2: Claims and awards: all lawsuits

Tribunal 15	Obs	Mean	Std. Dev.	Min	Max
Award	1,076	23,629	59,626	0	1,001,167
Claim	1,076	259,610	704,421	6,747	11,700,000
Imputed award unjustified firing	1,076	64,628	227,283	3,820	5,729,232
Imputed award justified firing	1,076	39,354	215,905	210	5,718,458
Percentage of claim obtained	1,076	29	52	0	298
Tribunal 6					
Award	547	56,387	412,704	0	4,760,639
Claim	547	239,368	884,063	3,043	11,600,000
Imputed award unjustified firing	547	116,493	712,852	2,038	11,600,000
Imputed award justified firing	547	95,009	679,282	348	11,600,000
Percentage of claim obtained	547	26	38	0	435

Table 3: Claims and awards: settled lawsuits

Tribunal 15	Obs	Mean	Std. Dev.	Min	Max
Award	729	27,133	54,438	0	1,001,167
Claim	729	224,530	674,030	6,747	11,700,000
Imputed award unjustified firing	729	64,522	263,099	3,820	5,729,232
Imputed award justified firing	729	40,426	254,523	210	5,718,458
Percentage of claim obtained	729	40	58	0	298
Tribunal 6					
Award	388	76,455	490,065	0	4,760,639
		*	*	Ü	
Claim	388	244,304	950,256	3,043	11,600,000
Imputed award unjustified firing	388	140,551	844,566	2,038	11,600,000
Imputed award justified firing	388	116,417	805,161	378	11,600,000
Percentage of claim obtained	388	33	42	0	435

Table 4: Claims and awards: tried lawsuits

Tribunal 15	Obs	Mean	Std. Dev.	Min	Max
Award	153	36,634	99,472	0	657,101
Claim	153	371,124	749,670	12,351	4,781,699
Imputed award unjustified firing	153	54,783	91,386	5,059	874,882
Imputed award justified firing	153	29,042	63,723	494	603,464
Percentage of claim obtained	153	16	40	0	218
Tribunal 6					
Award	69	18,339	32,977	0	186,293
Claim	69	172,743	288,103	32,519	1,894,045
Imputed award unjustified firing	69	56,537	101,839	8,997	710,333
Imputed award justified firing	69	41,224	88,467	1,101	611,824
Percentage of claim obtained	69	18	27	0	157

Table 5: Claims and awards: dropped lawsuits

Tribunal 15	Obs	Mean	Std. Dev.	Min	Max
Award	194	0	0	0	0
Claim	194	302,064	768,348	7,908	6,121,784
Imputed award unjustified firing	194	72,933	142,952	4,724	1,380,141
Imputed award justified firing	194	43,604	111,798	387	1,153,714
Percentage of claim obtained	194	0	0	0	0
Tribunal 6	_				
Award	90	0	0	0	0
Claim	90	274,189	919,378	7,216	5,731,157
Imputed award unjustified firing	90	61,089	135,145	4,261	840,863
Imputed award justified firing	90	46,079	127,729	348	797,792
Percentage of claim obtained	90	0	0	0	0

Table 6: Effects of worker's assertion and mode of termination on final payment (Dependent Variable: Log of final payment)

	Tribur	nal 15:	Tribunal 6:			
	Tobit Model with clustered obs	OLS with clustered obs	Tobit Model with clustered obs	OLS with clustered obs		
	coef std err	coef std err	coef std err	coef std err		
ln(worker's claim) trial	0.41 ** 0.19 -5.16 *** 1.08	0.34 ** 0.14 -3.41 *** 0.67	0.48 * 0.25 -3.05 *** 1.03	0.45 ** 0.20 -2.33 *** 0.77		
$R^2$	-3.10 1.06	0.15	-3.03 1.03	0.18		
Number of obs	1,076	1,076	547	547		
Censored obs	288		122			
		Dropped case	es excluded			
	Tribur	nal 15:	Tribunal 6:			
	Tobit Model with clustered obs	OLS with clustered obs	Tobit Model with clustered obs	OLS with clustered obs		
	coef std err	coef std err	coef std err	coef std err		
ln(worker's claim) trial	0.55 *** 0.10 -6.24 *** 0.74	0.51 *** 0.09 -5.49 *** 0.60	0.38 *** 0.13 -4.40 *** 0.80	0.39 *** 0.13 -4.01 *** 0.72		
$R^2$		0.52		0.38		
Number of obs	882	882	457	457		

Notes: The dependent variable is the log of the amount awarded to the employee in December 1998 pesos. In cases in which the amount awarded was zero, we set the log of the award to zero. Additionally, these cases are treated as censored observations in the Tobit model. All standard errors are calculated allowing for heteroscedasticity and for the possibility that the outcomes in cases that have been grouped into the same proceeding may be correlated. We use the notation of \*\*\* to denote significance at the 0.01 level. Similarly \*\* denotes significance at the 0.05 level and \* denotes significance at the 0.10 level. All models include dummy variables for the quarter in which the employee separated from the firm (33 quarters: 1991.4 - 1998.4 for tribunal 15 and 1990.4 - 1997.4 for tribunal 6). Each observation is given the weight of the inverse of its ex-ante probability of being included in the sample. See text for details.

32

Censored obs

94

Table 7: Effects of worker's assertion, mode of termination, and cases involving multiple workers on final payment (Dependent Variable: Log of final payment)

		Tribunal 15:				Tribunal 6:			
	Tobit Model with clustered obs		OLS with clustered obs		Tobit Model with clustered obs		OLS with clustered obs		
	coef	std err	coef	std err	coef	std err	coef	std err	
ln(worker's claim)	0.36 *	0.19	0.30 **	0.14	0.52	0.24	0.47 **	0.20	
trial	-4.79 ***	1.06	-3.16 **	0.68	-3.01 **	1.05	-2.30 **	* 0.79	
multiple workers	-1.85 **	0.83	-1.27 **	0.57	-1.79 *	0.99	-1.22 *	0.73	
$R^2$			0	.16			0.	19	
Number of obs	1,0	076	1,	076	5	547	5	47	
Censored obs	28	38			1	22			

Dropped cases excluded

	Tribunal 15:				Tribunal 6:				
	Tobit Model with clustered obs		OLS with clustered obs		Tobit Model with clustered obs		OLS with clustered obs		
	coef	std err	coef	std err	coef	std err	coef	std err	
ln(worker's claim)	0.53 **	0.11	0.50 *	** 0.10	0.39 **	0.13	0.39 **	0.13	
trial	-6.15	0.69	-5.43 *	** 0.56	-4.39 **	0.79	-4.00 **	0.71	
multiple workers	-0.36	0.37	-0.27	0.32	-0.13	0.57	-0.06	0.53	
$R^2$		0.52					0	.38	
Number of obs	8	882		882		457		457	
Censored obs		94			3	32			

Notes: The dependent variable is the log of the amount awarded to the employee in December 1998 pesos. In cases in which the amount awarded was zero, we set the log of the award to zero. Additionally, these cases are treated as censored observations in the Tobit model. All standard errors are calculated allowing for heteroscedasticity and for the possibility that the outcomes in cases that have been grouped into the same proceeding may be correlated. We use the notation of \*\*\* to denote significance at the 0.01 level. Similarly \*\* denotes significance at the 0.05 level and \* denotes significance at the 0.10 level. All models include dummy variables for the quarter in which the employee separated from the firm (33 quarters: 1991.4 - 1998.4 for tribunal 15 and 1990.4 - 1997.4 for tribunal 6). Each observation is given the weight of the inverse of its ex-ante probability of being included in the sample. See text for details.

Table 8: Effects of worker's assertion and cases involving multiple workers on final payment (Dependent Variable: Log of final payment)

		Tribun	nal 15:		Tribunal 6:			
	Tobit Model with clustered obs		OLS with clustered obs		Tobit Model with clustered obs		OLS with clustered obs	
	coef	std err	coef	std err	coef	std err	coef	std err
ln(worker's claim)	0.14	0.20	0.17	0.15	0.43 *	0.25	0.40 **	0.20
multiple workers	-2.46	** 0.89	-1.69 *	** 0.59	-1.85 *	1.00	-1.26 *	0.74
$R^2$			0	0.10			0.	16
Number of obs	1,	076	1,	,076	5	47	547	
Censored obs	2	288			1	22		
			Γ	Propped cas	es exclude	es excluded		
		Tribur	nal 15:			Tribunal 6:		

	Tribunal 15:				Tribunal 6:				
	Tobit Model with clustered obs		OLS with clustered obs		Tobit Model with clustered obs		OLS with clustered obs		
	coef	std err	coef	std err	coef	std err	coef	std err	
ln(worker's claim) multiple workers	0.16 -1.69 **	0.14 0.69	0.18 -1.44 **	0.13	0.25	0.17 0.65	0.26 *	0.16 0.61	
R <sup>2</sup>	1.07	0.16				0.15			
Number of obs	882		882		457		457		
Censored obs	9	4				32			

Notes: The dependent variable is the log of the amount awarded to the employee in December 1998 pesos. In cases in which the amount awarded was zero, we set the log of the award to zero. Additionally, these cases are treated as censored observations in the Tobit model. All standard errors are calculated allowing for heteroscedasticity and for the possibility that the outcomes in cases that have been grouped into the same proceeding may be correlated. We use the notation of \*\*\* to denote significance at the 0.01 level. Similarly \*\* denotes significance at the 0.05 level and \* denotes significance at the 0.10 level. All models include dummy variables for the quarter in which the employee separated from the firm (33 quarters: 1991.4 - 1998.4 for tribunal 15 and 1990.4 - 1997.4 for tribunal 6). Each observation is given the weight of the inverse of its ex-ante probability of being included in the sample. See text for details.

	Table 9	: Logit models of mode of	termination	
	D	ropped cases included		Dropped cases excluded
	settlement	dropped case	trial	settlement
	coef std err	coef std err coef	std err	coef std err
ln(worker's claim at filing)	-0.20 ** 0.08	0.00 0.09 0.33	*** 0.11	-0.44 *** 0.11
multiple workers	-0.96 *** 0.28	0.48 0.33 1.05	*** 0.34	-1.55 *** 0.39
Pseudo R <sup>2</sup>	0.08	0.04	0.12	0.15
Number of obs	1,076	1,076	982	867
		Tı	ibunal 6:	
	D	ropped cases included		Dropped cases excluded
	settlement	dropped case	trial	settlement
	coef std err	coef std err coef	std err	coef std err
ln(worker's claim at filing)	-0.07 0.10	-0.16 0.17 0.27	** 0.12	-0.24 ** 0.12
multiple workers	-0.66 * 0.38	0.90 ** 0.45 0.17	0.48	-0.45 0.53
Pseudo R <sup>2</sup>	0.10	0.12	0.10	0.10
Number of obs	525	462	427	359

When multiple employees from the same firm have their case adjudicated in the same proceeding, these observations are treated as correlated using the cluster option in STATA. We use the notation of \*\*\* to denote significance at the 0.01 level. Similarly \*\* denotes significance at the 0.05 level and \* denotes significance at the 0.10 level. All models include dummy variables for the quarter in which the employee separated from the firm (33 quarters: 1991.4 - 1998.4 for tribunal 15 and 1990.4 - 1997.4 for tribunal 6). In some cases, a dummy variable for quarter perfectly predicts the outcome. In these cases, the observations from that quarter are dropped. Each observation is given the weight of the inverse of its ex-ante probability of being included in the sample. See text for details

Table 10: Effects of worker's assertion, our calculation of the worker's real claim, and mode of termination on final payment (Dependent Variable: Log of final payment)

		Tribunal 15:				Tribunal 6:			
	Tobit Model with clustered obs		OLS with clustered obs		Tobit Model with clustered obs		OLS with clustered obs		
	coef	std err	coef	std err	coef	std err	coef	std err	
ln(worker's claim)	0.18	0.38	0.14	0.28	-0.18	0.48	-0.16	0.38	
ln(imputed claim)	0.33	0.50	0.28	0.37	0.85	0.52	0.79 *	0.42	
trial	-5.05 **	1.07	-3.31 *	** 0.68	-2.76 **	1.04	-2.07 **	0.78	
$R^2$			0.15				0	.19	
Number of obs	1,	076	1,076		547		547		
Censored obs	2	88			1	22			

#### Dropped cases excluded

	Tribunal 15:				Tribunal 6:			
	Tobit Model with clustered obs		OLS with clustered obs		Tobit Model with clustered obs		OLS with clustered obs	
	coef	std err	coef	std err	coef	std err	coef	std err
ln(worker's claim)	-0.03	0.21	-0.03	0.19	-0.13	0.23	-0.13	0.23
In(imputed claim)	0.82 **	* 0.29	0.76	** 0.26	0.66	0.33	0.66 **	0.31
trial	-5.95 **	* 0.73	-5.23 **	** 0.60	-4.16 **	0.80	-3.77	* 0.72
$R^2$		0.53				0.40		
Number of obs	882		882		457		457	
Censored obs	9	94			3	32		

Notes: The dependent variable is the log of the amount awarded to the employee in December 1998 pesos. In cases in which the amount awarded was zero, we set the log of the award to zero. Additionally, these cases are treated as censored observations in the Tobit model. All standard errors are calculated allowing for heteroscedasticity and for the possibility that the outcomes in cases that have been grouped into the same proceeding may be correlated. We use the notation of \*\*\* to denote significance at the 0.01 level. Similarly \*\* denotes significance at the 0.05 level and \* denotes significance at the 0.10 level. All models include dummy variables for the quarter in which the employee separated from the firm (33 quarters: 1991.4 - 1998.4 for tribunal 15 and 1990.4 - 1997.4 for tribunal 6). Each observation is given the weight of the inverse of its ex-ante probability of being included in the sample. See text for details.

Table 11: Effects of worker's assertion and our calculation of the worker's real claim on final payment (Dependent Variable: Log of final payment)

	Tribunal 15:				Tribunal 6:			
	Tobit Model with clustered obs		OLS with clustered obs		Tobit Model with clustered obs		OLS with clustered obs	
	coef	std err	coef	std err	coef	std err	coef	std err
ln(worker's claim)	-0.62	0.44	-0.43	0.31	-0.54	0.49	-0.44	0.39
ln(imputed claim)	1.17 **	0.58	0.90 *	* 0.41	1.22 **	* 0.53	1.07 **	0.43
$R^2$	0.09		0.09			0	.16	
Number of obs	1,076		1,076		547		547	
Censored obs	288				1	122		
	Dropped cases excluded							

Dropped cases excluded

	Tribu	nal 15:	Tribunal 6:			
	Tobit Model with clustered obs	OLS with clustered obs	Tobit Model with clustered obs	OLS with clustered obs		
	coef std err	coef std err	coef std err	coef std err		
ln(worker's claim)	-1.19 *** 0.34	-1.05 *** 0.29	-0.80 ** 0.31	-0.74 ** 0.30		
ln(imputed claim)	2.06 *** 0.45	1.87 *** 0.38	1.35 *** 0.38	1.29 *** 0.36		
$R^2$		0.20		0.20		
Number of obs	882	882	457	457		
Censored obs	94		32			

Notes: The dependent variable is the log of the amount awarded to the employee in December 1998 pesos. In cases in which the amount awarded was zero, we set the log of the award to zero. Additionally, these cases are treated as censored observations in the Tobit model. All standard errors are calculated allowing for heteroscedasticity and for the possibility that the outcomes in cases that have been grouped into the same proceeding may be correlated. We use the notation of \*\*\* to denote significance at the 0.01 level. Similarly \*\* denotes significance at the 0.05 level and \* denotes significance at the 0.10 level. All models include dummy variables for the quarter in which the employee separated from the firm (33 quarters: 1991.4 - 1998.4 for tribunal 15 and 1990.4 - 1997.4 for tribunal 6). Each observation is given the weight of the inverse of its ex-ante probability of being included in the sample. See text for details.

Table 12: The effects of "non-credible" claims on mode of termination

	Tribunal 15:				
	D	propped cases include	Dropped cases excluded		
	settlement	dropped case	trial	settlement	
	coef std err	coef std err	coef std err	coef std err	
ln(worker's claim / imputed claim)	-0.54 *** 0.15	-0.38 ** 0.19	1.45 *** 0.22	-1.49 *** 0.23	
multiple workers	-0.90 *** 0.28	0.53 0.33	1.04 *** 0.33	-1.39 *** 0.35	
Pseudo R <sup>2</sup>	0.08	0.05	0.20	0.22	
Number of obs	1,076	1,076	982	803	
	D	propped cases includ	Dropped cases excluded		
	settlement	dropped case	trial	settlement	
	coef std err	coef std err	coef std err	coef std err	
ln(worker's claim / imputed claim)	-0.66 *** 0.21	-0.15 0.28	1.33 *** 0.29	-1.43 *** 0.30	
multiple workers	-0.68 * 0.37	0.89 * 0.45	0.29 0.48	-0.61 0.52	
Pseudo R <sup>2</sup>	0.12	0.11	0.16	0.18	
Number of obs	525	462	427	359	

When multiple employees from the same firm have their case adjudicated in the same proceeding, these observations are treated as correlated using the cluster option in STATA. We use the notation of \*\*\* to denote significance at the 0.01 level. Similarly \*\* denotes significance at the 0.05 level and \* denotes significance at the 0.10 level. All models include dummy variables for the quarter in which the employee separated from the firm (33 quarters: 1991.4 - 1998.4 for tribunal 15 and 1990.4 - 1997.4 for tribunal 6). In some cases, a dummy variable for quarter perfectly predicts the outcome. In these cases, the observations from that quarter are dropped. Each observation is given the weight of the inverse of its ex-ante probability of being included in the sample. See text for details