EMPLOYMENT PROTECTION LEGISLATION, LABOR COURTS, AND EFFECTIVE FIRING COSTS

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Abstract
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JEL Classification: J52, J53, K31, K41

Keywords: Employment protection legislation, firing costs, Unemployment

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Abstract

Labor courts may influence firing costs. Apart from the procedural costs, there is the likelihood that labor courts declare firings as unfair or nil, which significantly increase severance payments over those established for fair dismissals by Employment Protection Legislation. In this paper we model the determinants of the wedge between mandated and effective firing costs arising from labor courts’ resolution of dismissals, and show how it is affected by EPL reforms, looking at recent EPL reforms in Spain (implemented in 2010 and 2012) that significantly widened the definition of fair economic dismissals.

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1 Introduction

In most countries Employment Protection Legislation (EPL, henceforth) establishes that workers dismissals must have a "fair cause". Additionally, EPL typically distinguishes between economic redundancies and disciplinary layoffs, and mandates different legal procedures and severance payments depending on the cause of the dismissal. Even in countries where EPL (or lack of it) follows the doctrine of "employment at will" (as in the US), restrictions that limit employers ability to fire are becoming more and more prevalent (see Autor et al., 2006).

Labor courts' certify the cause of dismissals. However, whether judges are neutral and unbiased agents with no discretion in their rulings over mandated legislation, and, hence, whether their rulings are based solely on the Law and facts, are controversial issues with economic consequences. There is indeed empirical evidence showing that judges seem to exploit some discretion and act with "social motivation" when dealing with labor market conflicts. For instance, in Italy there is some association between local labor market conditions, such as the unemployment rate, and labor courts' decisions (Macis, 2001, Ichino et al., 2005); in Germany, even after controlling for the fact that court activity varies systematically with the political leaning of the government that appoints judges, there is a significant positive relation between labor court activity and unemployment (Berger and Neugart, 2011); and in the UK unemployment and firms' bankruptcy rates seem also to be statistically associated to the probability of judges deciding in favor of dismissed employees (Marinescu, 2011).

Labor courts' intervention in the resolution of dismissals creates room for strategic behavior by employers and dismissed employees in the initiation and resolution of dismissals. Even though most dismissals are settled before there is a direct intervention of a labor court, agreements that employers and dismissed employees may reach depend on their expectations about labor courts' resolutions. Hence, the intervention of labor courts at solving dismissal conflicts determines effective firing costs for all dismissals, whether settled or ruled by judges. In sum, effective firing costs depend not only on the severance payments and conditions for dismissals established by EPL, but also on other costs

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1 The ILO's Convention 158 on Termination of Employment, ratified by many countries, states that "The employment of a worker shall not be terminated unless there is a valid reason for such termination connected with the capacity or conduct of the worker or based on the operational requirements of the undertaking, establishment or service".

2 OECD (2013) provides a descriptive analysis of how labor courts intervene in workers' dismissal conflicts in several countries. Within OECD countries, Spain and Portugal, together with Turkey and Chile, are the countries where they are exclusively under the jurisdiction of professional judges. For an early survey of models of legal disputes and their resolution, see Cooter and Rubinfeld (1989).

3 See Bornstein and Miller (2009), Posner (2010), Feld and Voigt (2003), Muñoz Aranguren (2011), and Danziger et al. (2011).

4 In the Appendix we give some indications of the existence of a ideological divide of judges acting in Spanish labor courts.

5 For a comprehensive analysis of the role of settlements at solving conflicts, see Daughety and Reinganum (2012).
associated with judicial litigation.

The aims of this paper are to model the determinants of the wedge between mandated and effective firing costs, and to show how EPL reforms may change this wedge. We do so in the light of recent EPL reforms in Spain (implemented in 2010 and 2012) that significantly widened the definition of fair economic dismissals and reduced severance payments for unfair dismissals.\(^6\) We observe settlements and the proportion of fair dismissals as ruled by individual labor courts at a quarterly frequency during the period 2004-2015. First, we look at the change in the likelihood of out-of-court settlements after the EPL reforms, and, secondly, we compare the proportion of fair rulings before and after the reforms. Both differences are estimated conditioning by a set of co-variates, mostly related to local labor market conditions, which may determine the selection of dismissal cases solved by judges and, hence, alter their rulings for reasons other than changes in EPL.

From this empirical exercise we draw two main conclusions. One is that out-of-court settlements increased after the reforms (in particular, after 2012), which is consistent with the selection of dismissal cases predicted by our model. Another is that the widening of fair causes of dismissals did not significantly increase the probability of a fair ruling by judges by much, so that extending the legal definition of fair economic redundancies did not delivered a noticeable reduction of effective firing costs beyond that implemented by diminishing severance payments.

The paper is organized in four more sections. First, we describe the particular features of Spanish EPL and its reforms in 2010 and 2012 (Section 2). Secondly, we lay off a theoretical model of the determinants of effective firing costs under employers’ uncertainty about labor judges’ rulings (Section 3). The model is tailored out to identify the main channels through which EPL reforms change the wedge between mandated and effective firing costs. Our empirical analysis of the effects of EPL reforms on effective firing costs is in Section 4. Finally, Section 5 concludes.

### 2 EPL: Fair and Unfair Dismissals

Spain is among the countries where EPL for regular workers is considered strict. In a nutshell EPL for regular employees is as follows.

- Terminations of employment contracts have to be justified by a fair cause, either economic, technological or organizational motives (economic redundancy) or lack of performance of the employee (disciplinary layoff).

- Dismissals for economic reasons were considered to be justified only in very restrictive cases, and exclusively as a measure of last resource. Fair

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\(^6\)Labor Reform Law of 2010, the Royal Decree-Law of 2011 and the Labor Reform Law of 2012. Besides changes in EPL that are analyzed in this paper, there were also modifications of the collective bargaining legislation, and some other measures addressed to reduce youth unemployment and increase the effectiveness of public employment services.
economic redundancies required the existence of either negative economic conditions, or technical, organizational or production reasons that put in danger the viability of the firm, and, moreover, the inexistence of other measures that could restore it. There were no specific provisions clarifying what "negative conditions" meant, so the ambiguity of the definition and the additional condition about the lack of other solutions gave judges a great deal of discretion.

In 2010 there was a substantial extension of the conditions under which a dismissal for economic reasons is to be considered fair, such as the incidence of current or anticipated losses, and a persistent decline in the firm’s level of revenues that could affect to its economic viability or its ability to maintain its level of employment. Moreover, the employer was no longer obliged to provide an objective proof that the dismissal was the only measure to restore the economic viability of the firm, but only some indication that it was needed to preserve the firm’s current or future competitive position. The labor market reform of 2012 made further progress on the clarification of what negative economic causes meant referring to situations in which "for three consecutive quarters the level of revenues or sales of the company was lower than in the same quarters of the previous year".

- Disciplinary layoffs are considered to be fair only in the cases of misconduct or lack of adaptation of the employee to the job’s tasks. Spanish EPL reforms did not substantially changed the definition of fair disciplinary layoffs.
- Dismissed employees can appeal to a labor court. In contrast with other countries, Spanish judges are not entitled to establish severance payments according to the characteristics of each individual case but only to declare the dismissal fair, unfair or null.\(^7\) A (out-of-court) settlement stage prior to the file of the claim in the labor court is compulsory.
- Employees on permanent contracts who are dismissed under fair economic reasons are entitled to a severance pay of 20 days’ wages per year of seniority, with a maximum of 12 months’ wages. Employees dismissed for fair disciplinary reasons are entitled to no severance pay. EPL reforms in 2010 and 2012 did not change the amount of severance pay for fair dismissals.
- If the dismissal was ruled out to be unfair, firms either had to pay 45 days’ wages per year of seniority with a maximum of 42 months’ wages or to reinstate the worker, and pay interim wages (those corresponding to the

\(^7\)A dismissal is null if there is discrimination (a violation of the fundamental rights of the employee) or breach of union rights. In this case, the dismissed employee ought to be reinstated and interim wages (those corresponding to the period between the dates of the dismissal and of the judicial resolution) paid. There are few cases of this nature brought to labor courts (see Palomo Balda, 2013).
period between the dates of the dismissal and of the judicial resolution). Since 2003 interim wages could be waived if, upon dismissal, the employer accepted that it was unfair. Hence, most firms paid severance pay for unfair dismissal up-front, and avoid a Labor Court intervention that could impose the payment of interim wages. After 2012 interim wages in case of unfair dismissals were eliminated de facto, even if the employer opted for the reinstatement of the dismissed employee, and severance pay for all unfair dismissals was reduced to 33 days’ wages per year of seniority with a maximum of 24 months’ wages.

Figure 1 sketches layoff procedures. Since the legal procedures for disciplinary layoffs were simpler, and severance pay in case of unfair dismissal was the same than under economic redundancies, employers most frequently initiate dismissals alleging disciplinary causes. During the 1984-2010 period, about 70% of dismissal cases resolved by labor judges’ rulings were declared unfair, with only a few of them being declared null.

It is also important to bear in mind that since 1984 Spanish policy-makers, facing strong opposition to change EPL under regular employment contracts, introduced employment flexibility at the margin by creating a wide array of "atypical" contracts. Regulation of these type of contracts changed several times and in fundamental ways, but segmentation between permanent and temporary employees, that began in the late 1980s, has prevailed since then. Thus, while regular employees are entitled the right to go to court to appealing the cause of the dismissal, and may get higher severance payments in the case of unfair dismissals, temporary employees did not have the right to appeal the termination of their contracts. Thus, employers use fixed-term and other kind of temporary contracts (nowadays amounting to about 25% of employment) to buffer against negative shocks leading to downsizing of their labor force. Additionally, it is also important to notice that economic redundancies may be implemented collectively, and it is obliged to do so when they affect to more than 10% of the firm’s labor force in a given quarter. Firing costs under collective dismissals are nevertheless higher than for individual layoffs.

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8 From 1996 onwards, there was a second-tier of permanent contracts targeted at some population groups, under which severance pay in case of unfair dismissals was 33 days’ wages per year of seniority with a maximum of 24 months’ wages.

9 See Bentolila et al. (2012). There is an extensive literature documenting the negative effects of dualism in the Spanish labor market (among others, García-Serrano, 1998, Bentolilla and Delgado 1994, Bentolilla et al., 2008, and Wolf and Mora-Sanguinetti, 2012).

10 After a recent ruling by the European Court of Justice making it clear that the termination of temporary contracts should apply the same principles of the dismissals of regular employees, the number of cases involving dismissed temporary employees brought to labor courts is rising.

11 See Costain, Jimeno, and Thomas (2010).
3 The determinants of effective firing costs: A theoretical model

The model aims at identifying the main determinants of effective firing costs, both mandated by EPL and originated by labor courts intervention in the resolution of dismissal conflicts. It resembles the features of EPL and labor courts in Spain as described above, but it can be adapted to similar cases of labor court interventions prevailing in other countries. The assumptions are:

- **Agents’ actions.** Employers (e), having decided to dismiss a worker (w), justify the dismissal as an economic redundancy (r) or as a disciplinary layoff (d). Upon dismissal, employers make an offer to the dismissed employees to settle the case before going to a labor court. There is sequential bargaining (employers’ proposals followed by workers’ counterproposals). If settlement is not reached, a labor court rules on the fairness of the redundancy/layoff.

- **Judges’ behavior.** For dismissals \(\{r, d\}\) brought to a labor court ruling, a judge rules if they are fair (f) or unfair (u). Judges observe the true profitability of the firm (\(\pi\)) and whether dismissed workers were shirking or not. Hence, they always rule untruthful redundancies/layoffs as unfair. However, they are driven by a social motivation that generates some uncertainty about the likelihood of a fair ruling when the alleged cause of the dismissal is truthful.\(^{12}\) Inspired by some empirical findings discussed in Section 4, we assume that social motivation leads judges to rule dismissals as unfair with a higher likelihood when local labor market conditions (\(\mu\)) worsens. Furthermore, following the spirit of the regulation of economic redundancies, we assume that they are more likely to be ruled as fair, the lower the profitability of the firm (\(\pi\)) is. We denote the probability of a truthful economic dismissal being ruled as fair by the Labor Court by \(x^r(\pi, \mu)\), with \(\frac{\partial x^r(\pi, \mu)}{\partial \pi} < 0\), \(\frac{\partial x^r(\pi, \mu)}{\partial \mu} < 0\). The probability of a truthful disciplinary layoff being ruled as fair by the Labor Court does not depend on firm profitability but only on local labor market conditions: \(x^d(\mu)\), with \(\frac{\partial x^d(\mu)}{\partial \mu} < 0\). For untruthful dismissals, \(x^d = x^r = 0\). There are red tape costs (court costs to be paid only by employers) which are higher for economic redundancies than for disciplinary layoffs (\(\tau^d, j = \{r, d\}\), with \(\tau^r > \tau^d\)). Severance payments are:

| Fair dismissal | Unfair dismissal |
|----------------|-----------------|
| Economic redundancies | \(c^f\) | \(c^u\) |
| Disciplinary layoffs | 0 | \(c^u\) |

\(^{12}\)Since we cannot observe the individual characteristics of each dismissal case, and we only have limited information about the characteristics of the judges, a more ambitious modelling of the judges’ behavior would not help us very much in the interpretation of the empirical results.
• **Agents’ expectations.** For some dismissals to be settled at labor courts, we assume that employers and dismissed workers have divergent expectations on labor courts’ rulings. The expected probabilities that dismissals are ruled as fair are: \( x^j_i \), where \( j \) denotes the type of dismissal (\( j = \{r, d\} \)), and \( i \) the agent holding that expected probability (\( i = \{e, w\} \)). Employers support their expectations on firm profitability, local market conditions, and employees’ shirking state.\(^{13}\) Workers hold their expectations knowing local market conditions, their shirking state, and the employer’s decision on whether to justify the dismissal as an economic redundancy or as a disciplinary layoff.\(^{14}\)

Table 1 gives what the Firms Expect to Pay (\( FEP \)) and what the Worker Expect to Get (\( WEG \)) if the dismissal conflict is solved by a judge.

| Economic Dismissals                  | \( FEP \)                      | \( WEG \)                      |
|-------------------------------------|--------------------------------|--------------------------------|
| Truthful                            | \( x^r_c(\pi, \mu)c^f + [1 - x^r_c(\pi, \mu)]c^u + \tau^r \) | \( x^r_w(\mu)c^f + [1 - x^r_w(\mu)]c^u \) |
| Disguised as disciplinary            | \( c^u + \tau^d \)             | \( c^u \)                      |

| Disciplinary Layoffs                | \( FEP \)                      | \( WEG \)                      |
|-------------------------------------|--------------------------------|--------------------------------|
| Truthful                            | \( 1 - x^d(\mu)c^u + \tau^d \) | \( 1 - x^d_w(\mu)c^u \)       |
| Disguised as economic               | \( c^u + \tau^d \)             | \( c^u \)                      |

### 3.1 Settlements

Settlements may arise after several rounds of proposals by the employers about severance payments and workers’ counterproposals\(^{15}\). Notice that in the case of economic redundancies, the worker’s expectations of a fair ruling is also affected by the signal sent by the employer about firm’s profitability when justifying the dismissal as an economic redundancy. In this game, the highest severance payment that the employer is willing to offer is \( FEP + \tau^i \), while the lowest severance payment that the worker is willing to accept is \( WEG + \tau^i \).

Thus, assuming that in the settlement stage all information about each party’s expectations is revealed (since it is a repeated game without a limitation in the number of proposals and counterproposals to be made), a settlement is reached whenever the employer’s expectation of a fair ruling is smaller than the

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\(^{13}\)For a model of dismissal conflicts with imperfect monitoring, see Galdón-Sánchez and Güell (2003).

\(^{14}\)That dismissed workers do not observe firm profitability is the source of asymmetric information in the sequential settlement game. Employers’ uncertainty on the probability of a fair ruling may arise from judges being of different types regarding their leaning towards social motivations.

\(^{15}\)Alternative models of settlements are presented in Daughety and Reinganum (2012).
worker’s expectation ($x^e_r(\pi, \mu) < x^w_r(\mu)$ and $x^d_e(\mu) < x^d_w(\mu)$, respectively). Upon settlement, effective firing costs are $x^c_w(\mu)c^d + [1 - x^c_w(\mu)]c^u + \tau^f$ for economic redundancies, and $[1 - x^w_w(\mu)]c^u + \tau^d$ for disciplinary layoffs. Alternatively, if settlements are not reached and the case is expected to be solved by a labor court, employers’ expected firing costs are: $x^c_w(\pi, \mu)c^d + [1 - x^c_w(\pi, \mu)]c^u + \tau^f$ for truthful economic redundancies, and $[1 - x^c_w(\pi, \mu)]c^u + \tau^d$ for truthful disciplinary layoffs.

As for untruthful dismissals, since they are always ruled as unfair by judges, and, hence, employers and workers expectations about a fair ruling are both nil, they will always be settled. Thus, effective firing costs are $c^u + \tau^d$ in the case of untruthful disciplinary layoffs and $c^u + \tau^r$ for untruthful economic redundancies.

3.2 The composition of dismissals

Employers’ decisions about dismissals to be initiated and the cause to be alleged for justifying them depend on expected effective firing costs. As for economic redundancies, employers will allege the true cause whenever:

$$E \{x^c_w(\mu)c^d + [1 - x^c_w(\mu)]c^u + \tau^f \} \delta^r + [x^c_w(\pi, \mu)c^d + [1 - x^c_w(\pi, \mu)]c^u + \tau^r] (1 - \delta^r) < c^u + \tau^d$$

being $\delta^r = 1 \{x^c_r(\pi, \mu) < E \{x^c_w(\mu)\}\}$, that is, the employer expectations on reaching a settlement. This condition yields

$$1 + \beta^r(\pi, \mu)\delta^r > \frac{\tau^r - \tau^d}{c^u - c^f}$$  \(1\)  

where $\beta^r(\pi, \mu) = \frac{E(x^c_w(\mu)) - x^c_r(\pi, \mu)}{x^c_r(\pi, \mu)}$ measures the employer expectations on diverging beliefs about the probability of a fair ruling of economic dismissals. Notice that if $\delta^r = 1$, then $\beta^r(\pi, \mu) > 0$, and, alternatively, if $\delta^r = 0$, then $\beta^r(\pi, \mu) < 0$. On the contrary, economic redundancies are disguised as disciplinary layoffs when condition (1) is not satisfied. Thus, for given employer’s expectations on the likelihood of a settlement, truthful economic redundancies are more likely as the difference between red tape costs of economic redundancies and disciplinary layoffs is small, and the difference between severance payments between unfair and fair dismissals, and the employer’s expected probability of a fair ruling are high. Also, if employers expect that dismissed workers have a high expectation of a fair ruling, then settlements are more likely, expected firing costs at settlements are lower and, therefore, they will be more likely to initiate truthful economic redundancies as such.

For disciplinary reasons to be claimed as the cause of truthful disciplinary layoffs it must happen that $E \{[1 - x^d_w(\mu)]c^u + \tau^d \} \delta^d + [1 - x^d_w(\mu)]c^u + \tau^d] (1 - \delta^d) < c^u + \tau^r$, being $\delta^d = 1 \{x^d_w(\mu) < E x^d_w(\mu)\}$. This condition is always satisfied as it implies $\left[1 + \beta^d(\pi, \mu)\delta^d\right] < \frac{\tau^r - \tau^d}{c^d - c^d} > 0$, where as before $\beta^d(\pi, \mu) = \frac{E(x^d_u(\mu)) - x^d_r(\pi, \mu)}{x^d_r(\pi, \mu)}$, is the corresponding employers’ expectation on the extent of divergent beliefs about the probability of a fair ruling of disciplinary layoffs.
Table 2 summarizes all the conditions determining the composition of dismissals, their resolution and the corresponding expected firing costs.

Table 2. Dismissals: Initiation, settlements and effective firing costs

|                | Economic        | Disciplinary | Disguised          |
|----------------|-----------------|--------------|--------------------|
| Initiated      | $1 + \beta' (\pi, \mu) \delta' >$ | Always       | $1 + \beta' (\pi, \mu) \delta' \leq \frac{x_{d} - x_{w}}{x_{d}^e(\pi, \mu)}$ |
| Settlement     | $x_{r}^e(\mu) < x_{w}^e(\mu)$ | $x_{d}^e(\mu) < x_{w}^d(\mu)$ | Always |
| Effective firing costs |                    |              |                    |
| if settled     | $x_{w}(\mu)c^f + [1 - x_{w}^r(\mu)]c^u + \tau^r$ | $[1 - x_{w}^d(\mu)]c^u + \tau^d$, $x_{w}^d(\mu)c^f + [1 - x_{w}^d(\mu)]c^u + \tau^d$ |
| at labor court | $x_{w}(\pi, \mu)c^f + [1 - x_{w}^r(\pi, \mu)]c^u + \tau^r$ | $[1 - x_{w}^d(\mu)]c^u + \tau^d$, $x_{w}^d(\mu)c^f + [1 - x_{w}^d(\mu)]c^u + \tau^d$ |

3.3 The effects of EPL changes in effective firing costs

We now analyze how EPL reforms change the composition of initiated dismissals, the composition of dismissals solved by labor courts, the likelihood of fair rulings, and effective firing costs. We do so by a list of propositions that easily follow from the conditions in Table 2 (and remarks most relevant in the case of Spanish EPL reforms). Table 3 summarizes the main predictions drawn from the following propositions.

**Proposition 1** Reducing severance payments/court costs for fair economic redundancies ($c^f, \tau^r$) leads to more dismissals being initiated as economic redundancies, and to less disguised dismissals, and diminishes effective firing costs of truthful dismissals. Assuming that judges’ behavior and employers’ and workers’ expectations on the probability of a fair ruling are unchanged by severance payments/court costs, the incidence of settlements does not change, and the probability of a fair ruling increases.

**Proposition 2** Reducing severance payments/court costs for unfair dismissals ($c^u, \tau^d$) leads to more economic redundancies be disguised as disciplinary layoffs, and diminishes effective firing costs of truthful and untruthful dismissals. Assuming that judges’ behavior and employers’ and workers’ expectations on the probability of a fair ruling are unchanged by the amount of severance payments/court costs, the incidence of settlements does not change, and the probability of a fair ruling decreases.

In the case of the Spanish labor market reform of 2012, $c^u$ was reduced, although this reduction was small for workers with long pre-reform employment spells. Red tape costs of economic dismissals ($\tau^r$) were reduced in 2010 and furthermore in 2012.
Proposition 3: Widening the fair causes of economic redundancies leads to more dismissals being initiated as economic dismissals, and to less disguised dismissals (since \( x_r(\pi, \mu) \) increases), decreases the incidence of settlements and effective firing costs for truthful dismissals, and increases the likelihood of a fair ruling.

We assume that widening the fair causes of economic redundancies increases \( x^- \) and, therefore, \( x_r \) and \( x^w_r \). The change in the incidence of settlement and the composition of dismissals depend on how much both employers’ expectations of a fair ruling and divergent beliefs (\( \beta^- \)) are modified by the mandated change in \( x^r \). The proposition assumes that \( x_r \) increases and \( \beta^- \) diminishes because asymmetric information on firm profitability implies that the updates in the employers’ expectations are larger than those in workers’ expectations. Under this assumption, the rise in the probability of a fair ruling comes through two channels. One is that the EPL change mandates a higher probability of fair rulings to judges. Another is that the proportion of disguised dismissals falls. The widening of fair causes of economic redundancies in Spain was significantly larger in the 2012 than in the 2010 reform.

Proposition 4: Lower firm profitability leads to more economic redundancies be initiated as such, and to less disguised dismissals, and lower effective firing costs. Settlements are less likely as employers update upwards their expectations on the probability of a fair ruling while the update in workers’ expectations is likely to be smaller because of asymmetric information about firm’s profits.

Proposition 5: Worsening of local labor market conditions leads to less economic dismissals be initiated as such, and to more disguised dismissals, and raises effective firing costs. It also leads to less disciplinary layoffs, since workers shirk less when alternative employment opportunities decline. Settlements are unchanged insofar as updates of probabilities of a fair ruling are the same for employers and for workers.

Spanish EPL reforms took place during an intense downturn, when firm profitability was falling and the unemployment rate increasing.

Table 3 summarizes the propositions above.

| Economic dismissals | Disciplinary | Settlements | Firing costs | Fair ruling |
|---------------------|--------------|-------------|--------------|-------------|
| Truthful | Disguised | | | |
| Severance payments/court costs | | | | |
| Fair dismissals | ↓ | ↑ | unchanged | unchanged | ↓ | ↑ |
| Unfair dismissals | ↓ | ↑ | unchanged | unchanged | ↓ | ↓ |
| Cause of economic dismissals | ↑ | ↓ | unchanged | ↓ | ↓ | ↑ |
| Downturns | | | | |
| Firm profitability | ↓ | ↑ | unchanged | ↓ | ↓ | ↑ |
| Local labor market conditions | ↓ | ↑ | ↓ | unchanged | ↑ | ↓ |
4 EPL reforms, settlements, and labor court rulings

4.1 Data

We collect information on dismissal rulings by each labor court at a quarterly frequency over the period 2004Q1-2015Q2. Data are provided by the Spanish General Council of the Judiciary (Consejo General del Poder Judicial, henceforth CGPJ), include the content of the ruling, i.e. if it was resolved in favor of the plaintiff (the employee) or the defendant (the employer), and refer exclusively to individual dismissals ruled by the first instance of the labor jurisdiction. One relevant piece of information that we do not observe is whether the dismissal conflict was an economic redundancy or a disciplinary layoff. Information on the employee’s characteristics is also missing. Regarding out-court-settlements, data comes from the official employment agency in charge of certifying the agreement between the employer and the employee and is disaggregated at the provincial level.16

There are 345 labor courts operating in Spain. Their location is uneven and largely reflects population and firm density: there are 43 courts in the province of Madrid, 44 in the province of Barcelona and only 1 or 2 in other 11 provinces. Each labor court is served by a single judge while there are 348 court clerks.17 Dismissed workers can only claim against the employer at a first-instance labor court located in the province where she is employed. If there are several labor courts in the province, workers cannot choose among them since conflicts are assigned according to predetermined rules.18 The rulings of first-instance labor courts may be appealed.19

As for labor court characteristics, we observe the type of judge ruling on the dismissal conflict, that is, whether she is the judge assigned to a particular court or appointed as a replacement, reserve or substitute of the former. Additionally, we also measure the congestion at labor courts when ruling dismissals. Following

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16There are 52 provinces in Spain. This disaggregation corresponds to the NUTS3 level of disaggregation used by EUROSTAT.

17It seems convenient to add some further clarifications on the peculiarities of Spanish labor courts (and, hence, on the nature of our data). Labor relations in Spain are regulated by the labor legislation, whose main piece is the Workers’ Statute. Conflicts between employees and employers are resolved in the labor courts (Juzgados de lo Social) which are regulated by the Law Regulating the Labor Jurisdiction (Ley Reguladora de la Jurisdicción Social) and, more generally, by the Organic Law of the Judiciary (Ley Orgánica del Poder Judicial). Labor jurisdiction is separated from other jurisdictions (civil, criminal or for suits under administrative law).

18Article 167 of the Organic Law of the Judiciary.

19Once the judge has ruled the case, one of the parties (the employee or the employer) may appeal at the labor chamber of the High Court of Justice of the corresponding Spanish region and, eventually, at the labor Chamber of the Audiencia Nacional or, before, the Fourth Chamber of the Supreme Court. Appeals are only possible in "extraordinary cases" ("suplicación" and "casación") and are solved after long periods of time (typically, around 3 years). As a result, appeals after the first instance ruling are infrequent. Thus, by restricting our analysis to the first-instance labor court rulings we are not excluding a significant number of cases that could be overturned at higher instances.
García-Posada and Mora-Sanguinetti (2015) the congestion rate is defined as the ratio between the sum of pending cases (measured at the beginning of the quarter) plus new cases in a specific quarter and the cases solved in the same quarter. In Spain, this ratio is usually above one. We have also constructed a measure which proxies the "general" effectiveness of the "pre-trial" settlement hearing called "pre-trial settlements ratio". It is calculated as the ratio of the number of pre-trial settlements finished with agreement divided by the sum of those settlements (with agreement) and the total number of dismissal trials.

As for variables related to local economic conditions, we use the provincial unemployment rate (in deviations with respect to the sample mean), the sectoral composition of activity in the province (relative employment weights of agriculture, industry, construction and services sectors), and the temporary employment rate (proportion of employees with fixed-term contracts out of the total number of employees). Firm profitability is measured by the lowest decile in the distribution of the return on assets (ROA) at each province.

Table 4 provides the definitions and data sources for all these variables. Table 5 displays some descriptive statistics.

4.2 Results

We start by discussing how the composition of dismissals and the incidence of settlements changed after the EPL reforms. On the former, we only have available information at the aggregate level that shows that the proportion of economic dismissals over all dismissals was increasing up to 2013 to decline afterwards (Figure 2). The acceleration of the increase observed after 2010 is consistent with the EPL reforms widening the definition of economic dismissals. The decline after 2013 conceivably reflects the improvement of the economic situation and, hence, of firm profitability when the economic recovery took some impulse in mid-2014, together with the deferred impact of the reduction of the severance payments for unfair dismissals implemented in 2012. The proportion of dismissals declared as fair by labor courts turns out to be around 27.5% as average during whole sample period. Surprisingly, this proportion shows a decreasing trend and falls further after the 2010 and 2012 EPL reforms (Table 6). There are also noticeable differences across provinces (Figure 3).

On the incidence of out-of-court settlements we exploit disaggregated data by province, and estimate to what extent the likelihood of out-of-court settlements changed after the EPL reforms by comparing data at the province/quarter level and controlling for other variables referred to the state of the local labor market. We also include as a co-variate the judicial congestion rate for dismissal lawsuits, since the larger this rate is, the larger the expected duration of the trial is, and, hence, there are more incentives for employers and workers to reach out-of-court settlements.

Results from OLS regressions are reported in Table 7, and show that, while the 2010 reform led to some decrease in the likelihood of settlements (columns 1 to 3), the 2012 had an opposite effect. Overall, the reduction in the odds of settlements is 3.2 percentage points lower after 2010, but 8 percentage points
higher after 2012. The association with the local unemployment rate is always negative (and almost always statistically significant), which suggests that workers expectations of the probability of a fair ruling decrease by more than employers’ expectations when the unemployment rate increases. The fact that out-of-court settlements increase after 2012, when the fair causes of economic redundancies were substantially extended, suggests that employers expectations of a fair ruling did not change substantially with the 2012 reform, even when firm profitability was falling. It is also noteworthy that the judicial congestion rate for trials increases the likelihood of settlements, confirming our conjecture above.

A tentative conclusion from the changes in the likelihood of out-of-court settlements is that dismissal conflicts being solved by labor court trials after the reforms are those in which employers expectations on the probability of a fair ruling increased by more and above dismissed workers expectations. We cannot see why this should happen in the case of disciplinary layoffs (whose regulation was unchanged) Thus, by joining this to the observation that the overall proportion of dismissals initiated as economic redundancies was higher after the reform, we conclude that, if anything, the proportion of economic redundancies out of all dismissal conflicts solved by labor courts ought to have increased. Unfortunately, this is a conjecture that we cannot prove with available data at the labor court level.

An increase in the weight of economic redundancies being solved by trial in the labor courts and the broadening of the definition of fair causes of economic dismissals should weight positively in the likelihood of fair rulings at the labor courts. Tables 8a and 8b show the determinants of the proportion of fair rulings by labour courts. Overall, our reading of those results boils down to the following main conclusions. First, the proportion of dismissals being ruled as fair is about 2-3 pp lower after the EPL reforms. However, there is also a negative statistical association between the proportion of dismissals being ruled as fair and the provincial unemployment rate. An increase in the unemployment rate of 10 percentage points is associated with a decrease in the proportion of fair rulings of about 5 percentage points. As for firm profitability, there is no statistically significant association with judges rulings, but after the 2010 reform it seems that judges’ decisions took more into account the economic situation of the firm, so that higher profitability led to lower probability of a fair ruling. Surprisingly, this change in the association between firm profitability and probability of a fair ruling remains after 2012 only in some specifications, so that judges’ consideration of economic circumstances (measured as in our data set) were restricted to the very short interim period of time between the two reforms. Thus, overall, we conclude that the EPL reforms slightly moderated the social motivation of the judges but did not have a drastic impact on the probability of fair rulings of economic redundancies.
5 Concluding remarks

When the gap between firing costs of fair and unfair dismissals is large, labor judges’ rulings on dismissal cases are critical for the determination of effective firing costs. Since judges often behave as socially motivated agents and have some discretion in their rulings in the application of mandated EPL, uncertainty about effective firing costs creates several areas for strategic behavior by employers and dismissed employees in the initiation and resolution of dismissal conflicts. All these elements make it difficult to infer how EPL reforms may change effective firing costs. We have presented a theoretical model that highlights several channels by which changes in EPL may be translated into changes in effective firing costs, and shown that divergent beliefs of employers and employees on the probability of a fair ruling and judges behavior end up being crucial for the determination of effective firing costs.

Building upon the Spanish experience of two significant EPL reforms in 2010 and 2012, we also provide evidence on how EPL and judges’ intervention determine the prevalence of "out-of-court" settlements and the proportion of fair rulings by labor judges in dismissal cases. In this episode, the proportion of economic dismissals over all dismissals was increasing in our period of analysis, but even with this composition effect, the probability that a dismissal was declared fair by a labor judge did not increase significantly when the fair causes of economic redundancies were extended. Since worsening labor market conditions, diminishing firm profitability, and reduction of severance payments for unfair dismissals are also factors that affect that probability, in some cases in opposite sense that the extension of fair causes, we cannot isolate precisely by how much this latter reform translated into a reduction of effective firing costs. Nevertheless, our reading of the result is that the reduction of effective firing costs in Spain after 2010 took place mainly because of the lower severance payments for unfair dismissals and less so due to the extension of the fair causes of economic redundancies.

This conclusion has three implications for the policy debate on the need of introducing further labor market reforms. One is that the reduction in effective firing cost has been lower than the one stipulated by the EPL reforms. Secondly, and similarly, the change of the indicators about the stringency of EPL for regular contracts usually discussed in the debate (for instance the OECD indicators), insofar as they are based on changes in legal firing costs and neglect the costs from labor courts’ intervention, overestimate the impact of the EPL reforms. Finally, since the reduction of effective firing costs for economic redundancies under the regular employment contract has been not as large as envisioned by the policy-makers, and given that the difference between these firing costs and the termination costs of temporary contracts, which determines the proportion of employees with fixed-term contracts, is still very large, the high incidence of temporary employment observed in Spain would not be very much reduced by these reforms.
6 Annex: Some information on the social motivation of judges acting in the labor jurisdiction

Measuring the social motivation of judges is a difficult task. Nevertheless, some approximation can be obtained by membership of the associations of judges. While Spanish law prohibits a judge to join a political party or a trade union while she is on active duty, it allows association in professional groups, which happen to have some "ideological" orientations. Currently, the major associations in Spain are the "Asociación Profesional de la Magistratura" (APM), "Jueces para la Democracia" (JpD), "Asociación Francisco de Vitoria" (FV), "Foro Judicial Independiente" (FJI), and the "Asociación Nacional de Jueces" (ANJ). APM is perceived as conservative. JpD is considered leftist and FV and FJI are considered "moderate".

Unfortunately, neither information on the association of each individual judge nor the presence of the judicial associations at the province level were available when constructing our database. In this regard, we only observed the relative weight of judges of different judicial associations at the fourth chamber of the Supreme Court (the one that settles employment and social security conflicts). This may be representative of the ideological orientation of first-instance labor courts for two reasons. First, the presence of the various associations in the Supreme Court may be the direct consequence of the presence of those associations at lower levels. Secondly, Supreme Court’s decisions (jurisprudence) are compulsorily followed by judges at lower levels for the interpretation of the Law, so that the survival of lower court decisions depends partially on their consistency with the Supreme Court decisions. As shown in Figure A1, the relative weight of magistrates pertaining to leftist associations gradually increased at the expense of conservative and moderate associations in the central years of our research (from 2005 until 2011) and maintained their supremacy in the chamber until 2014. It is conceivable that this trend was associated with an increase in the propensity to rule dismissal cases in favor of the employee, countering therefore the impact of the widening of fair causes for economic redundancies. It this were the case, the impact of the EPL reforms on labor court rulings should be upgraded by the change in the social motivation of judges taking place through the higher weight of leftist judges.
Figure A1. Proportion of magistrates belonging to professional associations

Note: Magistrates of the fourth chamber of the Supreme Court. Source: Authors’ own elaboration using Memorias del Tribunal Supremo.
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Figure 1: Layoff procedure in the Spanish labor jurisdiction

Source: Authors’ own elaboration

Notes:

a. Out-of-court settlements are resolved in Spain by the “MAC” units (“Mediation, Arbitration and Conciliation Units”). The majority of out-of-court settlements resolved with an agreement between the employer and the employee end up with the effective firing of the employee. Settlements ended without an agreement are the main group of dismissal conflicts which arrive to the labor courts. Following the data of the Ministry of Employment and Social Security, there was a total of 220095 out-of-court settlements in 2014, of which 101426 ended with agreement between the employer and the employee.

b. In 2014 the number of dismissals resolved at the labor court was 118225. This amount is calculated by adding the number of pre-trial settlements with agreement, the dismissals finally ruled by a labor court and the number of cases withdrawn (including tacit withdrawals and voluntary dismissal of action by the parties).

c. The number of pre-trial layoff settlements in 2014 was 48508.

d. In 2014, the number of dismissals resolved at the trial level in the labor courts was 42992, of which a 78% were dismissals ruled as “unfair” (in favor of the employee).

e. In 2014, 26725 dismissals were withdrawn (thus, they were not resolved by a judge in a trial) as a result of formal failures, tacit withdrawals and voluntary dismissal of action by the parties.
Figure 2: Proportion of economic dismissals over all dismissals

Source: Spanish Ministry of Labour
Figure 3: Percentage of labor court judgments ruling that the dismissal was fair.

a) 2004-2009

b) 2010-2015

SOURCE: Authors' own elaboration based on data provided by the CGPJ
| VARIABLE                        | DEFINITION                                                                 | SCALE/UNIT | PERIOD                     | SOURCE                                      |
|--------------------------------|----------------------------------------------------------------------------|------------|----------------------------|--------------------------------------------|
| Court rulings                  | Percentage of labor court judgments ruling that the dismissal was fair or justified | %          | By court, 2004-2015        | CGPJ                                       |
| Reform 1                       | Period of enforcement of the 2010 labor market reform                        | Dummy      | 2004-2015                  | Self elaboration                           |
| Reform 2                       | Period of enforcement of the 2012 labor market reform                        | Dummy      | 2004-2015                  | Self elaboration                           |
| Interaction 1                  | Interaction between reform 1 and the unemployment rate                       | %          | By province, 2004-2014     | Spanish National Statistics Institute (INE) |
| Interaction 2                  | Interaction between reform 2 and the unemployment rate                       | %          | By province, 2004-2014     | Spanish National Statistics Institute (INE) |
| Unemployment rate              | Percentage of total workforce which is unemployed and is looking for a paid job (in differences from the average) | %          | By province, 2004-2014     | Spanish National Statistics Institute (INE) |
| Profitability                  | Return on assets (ROA) for the 10% of firms with a lower ROA                | %          | By province, 2004-2013     | Banco de España                            |
| Temporary employment rate      | Percentage of total workforce which has a fixed-term contract               | %          | By province, 2004-2014     | Spanish National Statistics Institute (INE) |
| Share of services              | Percentage of total workforce working on services sector                     | %          | By province, 2004-2014     | Spanish National Statistics Institute (INE) |
| Share of industry              | Percentage of total workforce working on services sector                     | %          | By province, 2004-2014     | Spanish National Statistics Institute (INE) |
| Share of construction          | Percentage of total workforce working on services sector                     | %          | By province, 2004-2014     | Spanish National Statistics Institute (INE) |
| Proportion of dismissal lawsuits analyzed (+) by professional judges over total | Percentage of labour court judgments ruling that the dismissal was fair or justified by professional judges over all the dismissal lawsuits analyzed by all judges | %          | By court, 2004-2015        | CGPJ                                       |
| Proportion of interim postings at the labor courts | Percentage of positions at the labour courts held by interim judges | Fraction | By court, 2004-2014        | CGPJ                                       |
| Judicial congestion rate (dismissals lawsuits) | Ratio between the sum of pending cases in a labor court plus new cases and the cases resolved in the same quarter | Fraction | By court, 2004-2014        | CGPJ                                       |
| Judicial congestion rate (pre-trial settlements) | Ratio between the sum of pending settlements in a labor court plus new settlements and the settlements resolved in the same quarter | %          | By court, 2010-2015        | CGPJ                                       |
| Out-of-court settlements ratio  | Ratio of the number of out-of-court settlements finished with agreements divided by the sum of those settlements (with agreement) and the total number of dismissal lawsuits | %          | By province, 2004-2015     | CGPJ                                       |
Table 5: Descriptive statistics

| VARIABLE                                                      | Obs   | Mean  | Std. Dev. | Min  | Max  |
|---------------------------------------------------------------|-------|-------|-----------|------|------|
| Court rulings                                                | 14859 | 0.485 | 0.128     | 0    | 1    |
| Reform 1                                                     | 15268 | 0.409 | 0.492     | 0    | 1    |
| Reform 2                                                     | 15268 | 0.250 | 0.433     | 0    | 1    |
| Unemployment rate                                            | 14921 | 0.163 | 0.083     | 0.025| 0.432|
| Profitability                                                | 13880 | 0.040 | 0.404     | 0    | 13.538|
| Temporary employment rate                                    | 14921 | 0.280 | 0.080     | 0.131| 0.595|
| Share of services                                            | 14921 | 0.703 | 0.083     | 0.438| 0.889|
| Share of industry                                            | 14921 | 0.152 | 0.061     | 0.031| 0.369|
| Share of construction                                        | 14921 | 0.098 | 0.034     | 0.033| 0.239|
| Proportion of dismissal lawsuits analyzed (+) by professional judges over total | 15962 | 0.865 | 0.226     | 0    | 1    |
| Proportion of interim postings at the labor courts           | 15092 | 0.036 | 0.172     | 0    | 2    |
| Judicial congestion rate (dismissals lawsuits)               | 12492 | 2.234 | 0.671     | 1    | 13   |
| Judicial congestion rate (pre-trial settlements)             | 3950  | 12.510| 5.546     | 0.956| 110  |
| Out-of-court settlements ratio                                | 2000  | 0.485 | 0.485     | 0    | 0.931|
Table 6: Summary statistics of fair rulings at labor courts

| Year | Obs. | Mean  | Stand. Dev. | Min. | Max. |
|------|------|-------|-------------|------|------|
| 2004 | 1187 | 0.2790| 0.1409      | 0    | 1    |
| 2005 | 1194 | 0.2936| 0.1405      | 0    | 0.9  |
| 2006 | 1247 | 0.2969| 0.1426      | 0    | 1    |
| 2007 | 1256 | 0.2956| 0.1386      | 0    | 0.8571|
| 2008 | 1266 | 0.2513| 0.1259      | 0    | 0.8333|
| 2009 | 1294 | 0.2247| 0.1113      | 0    | 0.7368|
| 2010 | 1317 | 0.2552| 0.1142      | 0    | 0.6897|
| 2011 | 1352 | 0.2725| 0.1194      | 0    | 0.8182|
| 2012 | 1356 | 0.2469| 0.1189      | 0    | 0.7593|
| 2013 | 1356 | 0.2315| 0.1167      | 0    | 1    |
| 2014 | 1356 | 0.2257| 0.1121      | 0    | 0.75  |
| 2015 | 678  | 0.2196| 0.1139      | 0    | 1    |

Source: Authors’ own elaboration based on data provided by the CGPJ
Table 7: Determinants of out-of-court settlements ratio (OLS)

|                              | 2010 reform |          |          |          |          |          |          |          |          | 2012 reform |          |          |          |          |          | Both reforms |
|------------------------------|-------------|----------|----------|----------|----------|----------|----------|----------|----------|-------------|----------|----------|----------|----------|----------|--------------|
|                              | 1           | 2        | 3        | 4        | 5        | 6        | 7        | 8        | 9        | 4           | 5        | 6        | 7        | 8        | 9        |              |
| Reform 2010                  | -0.032      | 0.050    | 0.078    |          |          |          | -0.121   |          | 0.055    | 0.083       | 0.234    | 0.113    | 0.178    | 0.236    | 0.108    |
|                             | (0.017)     | (0.020)  | (0.018)  |          |          |          | (0.015)  |          | (0.017)  | (0.017)     | (0.012)  | (0.013)  | (0.011)  | (0.010)  | (0.013)  |
| Reform 2012                  |             |          |          | 0.083    | 0.234    | 0.113    |          |          |          | 0.083       | 0.234    | 0.113    |          |          |          |              |
|                             |             |          |          | (0.017)  | (0.012)  | (0.013)  |          |          |          | (0.017)     | (0.012)  | (0.013)  |          |          |          |              |
| Unemployment rate            | -0.706      | -0.031   | -1.270   | -1.240   | -0.215   | -1.270   | -0.031   | -1.270   | -1.240   | -0.215      | -1.270   | -0.031   | -1.270   | -0.031   | -1.270   | -0.031   |
|                             | (0.097)     | (0.184)  | (0.012)  | (0.097)  | (0.195)  | (0.012)  | (0.097)  | (0.195)  | (0.012)  | (0.097)     | (0.195)  | (0.012)  | (0.097)  | (0.195)  | (0.012)  | (0.097)  |
| Judicial congestion rate     | 0.063       |          | 0.056    |          |          |          | 0.055    |          |          | 0.063       |          | 0.056    |          |          | 0.055    |
|                             | (0.012)     |          | (0.011)  |          |          |          | (0.011)  |          |          | (0.012)     |          | (0.011)  |          |          | (0.011)  |
| Other controls               | NO          | NO       | YES      | NO       | NO       | YES      | NO       | NO       | YES      | NO          | NO       | YES      | NO       | NO       | YES      |              |
| Observations                 | 2,000       | 2,000    | 2,000    | 2,000    | 2,000    | 2,000    | 2,000    | 2,000    | 2,000    | 2,000       | 2,000    | 2,000    | 2,000    | 2,000    | 2,000    |              |
| R-squared                    | 0.007       | 0.008    | 0.159    | 0.029    | 0.079    | 0.179    | 0.088    | 0.081    | 0.179    | 0.029       | 0.079    | 0.179    | 0.088    | 0.081    | 0.179    |
| Number of provinces          | 50          | 50       | 50       | 50       | 50       | 50       | 50       | 50       | 50       | 50          | 50       | 50       | 50       | 50       | 50       |

a. Robust standard errors in parenthesis. Province fixed effects included.
b. Out-of-court ratio is measured as the number of out-of-court settlements over the total dismissals lawsuits plus the number of out-of-court settlements.
c. Other controls: temporary rate, sectoral distribution of employment, proportion of interim postings at labor courts.
### Table 8a: Determinants of the proportion of fair rulings by labor courts (OLS)

|               | 2010 reform | 2012 reform |
|---------------|-------------|-------------|
|               | 1           | 2           | 3           | 4           | 5           | 6           | 7           | 8           | 9           | 10          |
| Reform dummy  | -0.022      | 0.0359      | -0.009      | 0.004       | 0.019       | -0.035      | -0.005      | -0.064      | -0.019      | -0.012      |
|               | (0.005)     | (0.005)     | (0.016)     | (0.017)     | (0.018)     | (0.005)     | (0.006)     | (0.019)     | (0.021)     | (0.027)     |
| Unemployment rate | -0.480      | -0.587      | -0.482      | -0.440      | -0.260      | -0.296      | -0.421      | -0.392      | -0.064      | -0.019      |
|               | (0.073)     | (0.077)     | (0.125)     | (0.135)     | (0.062)     | (0.062)     | (0.126)     | (0.133)     |             |             |
| Reform dummy*Unemployment rate | 0.264  | 0.164      | 0.103       |             |             | 0.266      | 0.098       | 0.058       |             |             |
|               | (0.067)     | (0.072)     | (0.072)     |             |             | (0.073)     | (0.084)     | (0.097)     |             |             |
| Profitability | 0.021       | 0.001       | 0.023       |             |             | -0.006     | -0.005      | 0.020       |             |             |
|               | (0.038)     | (0.042)     | (0.041)     |             |             | (0.034)     | (0.043)     | (0.042)     |             |             |
| Reform dummy*Profitability | -0.026 | -0.207      | -0.250      |             |             | 0.001      | -0.195      | -0.225      |             |             |
|               | (0.034)     | (0.090)     | (0.086)     |             |             | (0.034)     | (0.163)     | (0.161)     |             |             |
| Other controls | NO          | NO          | YES         | YES         | NO          | NO          | YES         | YES         |             |             |
| Observations | 14,181      | 13,842      | 12,825      | 11,373      | 8,445       | 14,181      | 13,842      | 12,825      | 11,373      | 8,445       |
| R-squared    | 0.008       | 0.036       | 0.040       | 0.051       | 0.047       | 0.017       | 0.029       | 0.028       | 0.048       | 0.044       |
| Clusters (provinces) | 343     | 343         | 343         | 339         | 255         | 343         | 343         | 339         | 255         |             |

a. Robust standard errors in parenthesis. Labor court fixed effects included.
b. In column (5) and (10) Madrid and Barcelona are excluded.
c. Additional controls in all specifications: proportion of dismissal lawsuits analyzed by professional judges, proportion of temporary positions at the labor courts, and judicial congestion rate.
d. Other controls: temporary employment rate, sectoral distribution of employment.

### Table 8b: Determinants of the proportion of fair rulings by labor courts (OLS)

|               | 1           | 2           | 3           | 4           | 5           | 6           | 7           | 8           | 9           | 10          |
|---------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Reform dummy  | -0.001      | 0.041       | 0.013       | 0.004       | 0.018       |             |             |             |             |             |
|               | (0.006)     | (0.005)     | (0.019)     | (0.019)     |             |             |             |             |             |             |
| 2012 reform dummy | -0.034     | -0.015      | -0.074      | -0.001      | -0.002      |             |             |             |             |             |
|               | (0.005)     | (0.006)     | (0.019)     | (0.021)     |             |             |             |             |             |             |
| Unemployment rate | -0.445      | -0.565     | -0.480      | -0.436      |             |             |             |             |             |             |
|               | (0.077)     | (0.078)     | (0.127)     | (0.136)     |             |             |             |             |             |             |
| Reform dummy*Unemployment rate | 0.184      | 0.168      | 0.110       |             |             |             |             |             |             |             |
|               | (0.086)     | (0.081)     | (0.081)     |             |             |             |             |             |             |             |
| 2010 reform dummy | 0.224       | -0.004     | -0.005      |             |             |             |             |             |             |             |
|               | (0.076)     | (0.087)     | (0.101)     |             |             |             |             |             |             |             |
| Profitability | 0.002       | 0.024       |             |             |             |             |             |             |             |             |
|               | (0.042)     | (0.041)     |             |             |             |             |             |             |             |             |
| 2010 reform*Profitability | -0.186     | -0.228      |             |             |             |             |             |             |             |             |
|               | (0.073)     | (0.074)     |             |             |             |             |             |             |             |             |
| 2012 reform*Profitability | -0.050     | -0.041      |             |             |             |             |             |             |             |             |
|               | (0.153)     | (0.155)     |             |             |             |             |             |             |             |             |
| Sectors (share) | NO          | NO          | NO          | YES         | YES         |             |             |             |             |             |
| Observations | 14,181      | 13,842      | 13,842      | 11,373      | 8,445       |             |             |             |             |             |
| R-squared    | 0.017       | 0.038       | 0.046       | 0.051       | 0.047       |             |             |             |             |             |
| Clusters (provinces) | 343     | 343         | 343         | 339         | 255         |             |             |             |             |             |

a. Robust standard errors in parenthesis. Labor court fixed effects included.
b. In column (5), Madrid and Barcelona are excluded.
c. Additional controls in all specifications: proportion of dismissal lawsuits analyzed by professional judges, proportion of temporary positions at the labor courts, and judicial congestion rate.
d. Other controls: temporary employment rate, sectoral distribution of employment.