"Labor Market Outcomes and the Enforcement of the Employment Protection Legislation"

Henri Fraisse, Cornell University and Banque de France[1]
Francis Kramarz, CREST-INSEE, CEPR, and IZA
Corinne Prost, CREST-INSEE

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## Abstract

This paper assesses the impact of labor market regulations on labor market outcomes through the use of enforcement indicators. First, it uses cross-sectional variations over the French territory in the number of judges in charge of individual labor disputes. The very presence of labor courts is supposed to act as a threat to employers by limiting their ability to fire at will and encouraging their compliance to labor regulations. We show by using an original and exhaustive data set of the individual cases that were brought to these labor courts over the period 1990-2004 that the number of judges in a court (their "density") affects case outcomes by giving weight to this threat. Second, as a proxy for judicial firing costs, we use the legal representations of workers and firms involved in labor disputes and the filing rate- e.g. the number of claims over the number of firings. We instrument them by judicial environment variables. We find that local regulation institutions limit the volatility of labor flows, particularly in the most populous areas in the trade and service sectors and in both small and large firms. Using the French Labor Survey, we find that enforcement forces significantly decrease the employment rates –particularly those of the low-educated and of female workers. As an illustration, we try to evaluate the impact of the forthcoming reform of the judiciary map which should lead to the closure of 63 among the existing 271 labor courts.

# 1 Introduction

In a provocative NBER working paper on labor market flexibility, Richard Freeman (2004) states that -- after more than one decade spent by labor economists and international organizations to convince themselves through inconclusive aggregate data analyses and cross-country comparisons that a negative relationship between employment protection legislation (EPL hereafter) and labor market performance should prevail -- it was time to switch to micro-analysis of workers and firms and experimental methods. In a seminal paper, Lazear (1990), who uses the unemployed benefit and severance payment given to a blue collar with 10 years of service as a proxy for labor market flexibility, acknowledges that high overall labor market flexibility can prevail without being captured by any of those two variables. Hence, one might conclude with Freeman that cross-country analyses are hardly convincing since "with only 30 or so advanced countries, highly correlated outcomes, and infrequent changes in institutions, the number of configurations can easily exceed the number of independent data points". Another point of criticism to these cross-country analyses is that EPL

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[1] Corresponding author: hf42@cornell.edu. +33 (0)2 .45.26.29.86. Banque de France-31 Rue Croix-des-Petits Champs 75001 Paris, France.

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indices typically used in these analyses are deemed exogenous and imperfectly capture how the behaviors of unions, employer federations, or governing regulators change over time.

Taking partly into account these critiques, a recent strand of literature has assessed the impact of EPL within countries. It is typically done by measuring the impact of a change in legislation targeted to a specific category within a whole country or -in the case of the US- the impact of the different timing in the introduction of a new EPL in different states. Wrongful-discharge protections were adopted by US state courts during the last three decades. Autor, Donohue and Schwab (2004) take advantage of the between-state variation in the timing of the introduction of these labor laws and estimate their impact using difference-in-difference estimators. The "implied-contract" exception law, meaning that the employer implicitly promised not to terminate a worker without good cause, is found to have reduced state employment rate by 0.8 to 1.6%. Boeri and Jimeno (2003), using the 1990s tightening of the Italian regulation for firms with less than 15 employees, find that the threshold does matter in conditioning layoff and hiring probabilities but find no significant impact on employment growth. Bauer et alii (2007) find no effect of the change in the German EPL exemption for small firms on worker turnover.

Unfortunately, this last strand of research suffers from several downsides as well. First, these studies do not provide information concerning the degree of **enforcement** of labor regulations. To which extent these regulations were used by workers to defend their own interest and are they actually binding for the employers? For instance, in the case of the US, even if judicial breaks to the employment-at-will doctrine have been judged by some state courts, we have little evidence on the extent to which they are used or even known by the workers and to which they act as a credible threat to the employment-at-will policy. The state of California recognized the application of the covenant of good faith and fair dealing to employment relationships in 1980. In March and April 1986 about 100 cases were filed in Los Angeles which would lead to an approximate number of 1,000 for the whole year in the entire state[2] (that is about 80 cases for one million of workers).[3] In comparison, for France with a very population and GDP similar to those of California, the number of cases in any given year is approximately 200,000. Of course, one could argue that the law can act on the employer in a pre-emptive way but, to capture any effect in the data, this impact should be very strong (or conversely the impact on employment of labor courts should be extreme in France). Second, labor laws are subject to court interpretation and could vary over time. As pointed out by *OECD 2004 Employment Outlook*, even if an employer can be sanctioned in case of non-respect of EPL, "these provisions are subject to court interpretation and this may constitute a major (but often hidden) source of variation in EPL strictness both across countries and over time". In addition, methodologically, the timing of

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[2] In 1986, civil case filings in Los Angeles represented about 60% of all civil activity in the state of California.
[3] These figures are taken from Dertouzos (1986).

introduction of a new EPL can substantially alter the results. Indeed, Miles (2000) - using a different classification of cases in identifying the adoption dates - finds no significant effects. Third, problems of endofeneity remain: court interpretation with the ensuing impact might not be exogenous as market conditions could impact the leniency of the courts, the introduction of new laws, or the workers' tendency for litigation. Ichino et alii (2003), using micro data on labor court cases, focus on this institutional endogeneity of EPL enforcement. They show that in the case of an Italian bank of approximately 20,000 employees among which 409 workers were fired and 86 of them went to trial over more than 20 years, a higher unemployment rate increases the worker's probability of winning. In contrast, Marinescu (2006) - using data from a 1992 survey of Employment Tribunal Applications in Great Britain - finds that a higher unemployment rate leads to more severe decisions against the worker, in particular if the worker already found another job.

Our contribution to the literature on EPL impacts on labor market outcomes is threefold. First, we work at the level of France, a country in which many institutions are centralized and do not vary across labor courts (minimum wage, taxes…). Second, we open the black box of EPL by directly considering individual cases that face varying degrees of regulations across space and time. Third, the French institutional setting offers plausible instruments to correct for the endogeneity of EPL.

In France, workers can contest the conditions of a firing by filing a case to a local labor court. We use information collected by the French Ministry of Justice on all cases that were filed over the 1990-2004 period (2 millions of cases) to compute EPL enforcement indicators. We match these local EPL indicators with local measures of job flows. To illustrate the endogeneity problem we might face using judicial data for EPL indicators, let us consider the worker's "victory rate at trial". A higher rate might well correspond to a stricter EPL leading to a decrease in job creations and job destructions as justified in theory by Bentolila and Bertola (1992). However, reverse causation from labor flows or more generally from the business cycle is likely to occur: judges might be more biased in favor of workers in a downturn and the quality of cases brought to court is also likely to depend upon the business cycle. More importantly, facing a higher unemployment rate, workers might be more litigious bringing down the quality of cases going to trial since more is at stake. This point is easily illustrated by theoretical models of litigations such as those proposed by Bebchuk (1984) or Priest and Klein (1984). Empirically, Siegelman and Donohue (1995) find that cases of employment discrimination rise in downturns and are more likely to be lost.[4]

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[4] With an efficiency wage story, we might on the contrary suppose that, facing a higher penalty when they lose their jobs, workers put more effort on their job during a downturn and those who are fired are in better position to dispute the firing.

In order to correct for endogeneity related to current labor market conditions, we use the average number of judges or number of clerks available at the level of the court. We also use exogenous source of change in EPL enforcement such as the lawyer density in the labor court area, the staff of the local civil tribunal, the average duration of a case or the local number of cases as predicted from national aggregates. Our favorite exogenous measure of EPL is the number of judges at the local labor courts. In theory, the number of judges should be related to the number of cases filed to each labor court and, thus, be endogenous in a labor flow equation. In practice, the French labor court system did not change much (to put it mildly) over the last three decades ,even though employment changes in a sizeable number of areas should have entailed a (drastic) change in the number of judges (some courts had too few when others had too many filed cases per judge).

Section 2 describes the French labor court institutional setting. Section 3 presents a simple theoretical model relating the enforcement of labor laws to firing costs. Section 4 describes our data sets and provides some descriptive statistics. Section 5 explains our empirical methodology to capture EPL causal effects and presents our regression results on labor flows. Section 6 provides an instrumental strategy. Section 7 focuses on the EPL effect on some labor market stock variables.

# 2 Labor Courts in France: the Institutional Setting

## 2.1 French Firing Laws

Three types of events may trigger the firm's decision to fire a worker: a grave misconduct, a lay-off due to a slowdown in the business activity, or an insufficient level of competence. Under the current French law, the separation should be declared as a redundancy (or economic dismissal). However, in France as in many European countries an economic dismissal may entail a more complicated and time consuming process as well as the payment of large severance fees. On the contrary, a dismissal for misconduct is a faster process - if not challenged by the worker or if confirmed by the labor court. Thus the dismissal for "just" cause implies a lower firing cost than a redundancy. When fired, a French worker might sue the firm. Since a bill passed in 1973, every individual dismissal must be justified by a "real and serious cause" and the firm has the burden of proof. Without delving deep into 30 years of jurisprudence that have made this concept simultaneously blurred and precise, "real" means that the wrongdoing justifying the dismissal must be objectively defined, accurate, and in line with the mandatory firing notification letter. For example, being ten minutes late does not mean being seventy minutes late ; a lack of performance or a lack of trust is not considered as "real" if it is not objectively measured. The cause is considered as "serious" only if it is related to the professional activity of the worker and if it makes the labor relation impossible to continue. There are various degrees of "seriousness". Some lead to "grave misconduct" (for example brawl or thievery) which allows the employer to totally deprive the worker of severance payment.

In addition to the cause of the dismissals, the employee can sue the employer if he did not follow the mandatory legal steps of the firing process (for example the employer must notify one week in advance that the employer intends to meet the worker in order to discuss his firing).

As pointed out by Galdon-Sanchez and Guel (2003), EPL legislation in European countries gave rise to a double moral hazard problem: a worker fired for misconduct has an incentive to sue for unfair dismissal and a firm has an incentive to label "misconduct" a separation which, in reality, is a redundancy. Thus, even if this phenomenon is obviously hard to detect in the data, the proportion of dismissals for economic reasons decreased from 61% in 1993 to 24% in 2004.

## 2.2 French Labor Courts

The French labor justice is mainly dispensed by the "Prud'hommes" which is the relevant jurisdiction to every labor dispute arising at the individual level in France. There are several labor courts in each Prud'hommes. As the legislators wanted to take into account industry characteristics of the cases brought to court, each Prud'homme is divided into 4 sections according to the main activity of the firm: Agriculture, Retail Trade, Manufacturing, and Other Activities (mainly Services). A fifth section is dedicated to deal with cases involving "managers" irrespective of the activity of the firm.

The judges in the Prud'hommes are not professional judges and can be seen as performing a public duty. Each labor court comprises judges representing employers and judges representing employees in equal number. These judges are elected every five years within lists established by unions and federations. All employees are entitled to vote. They select judges in the union lists. Similarly, employers vote and select judges within the federation lists. All French establishments are allocated to one Prud'homme. On the employee side, the electoral body includes all private sector workers with a labor contract. They are enrolled on the electoral list based on a mandatory administrative reporting from their employer. Unemployed can also vote but have to enroll on the list by themselves. On the employer side, in addition to employers and business owners, employees entitled to take firing or hiring decisions can also vote for employer representatives.

Prud'hommes are supposedly not very formal and should be seen as conciliation boards. Prud'hommes were designed to foster agreements rather than trials. Therefore a first and mandatory step in each trial is a conciliation audience where plaintiffs and defenders explain their grievance and judges try to push for an agreement. If they do not, the case is judged. If an equal number of judges is pro worker and against her, there is a tie ("solution de départage"). In that case, a single professional judge decides the outcome of the trial.

In the 90's, 264 Prud'hommes are spread all over metropolitan France, a labor court being at most within a radius of 30 miles from any establishment. Even though a majority of plaintiffs are represented by a lawyer, going to labor court is not necessarily expensive. For instance, local administration provides a list of benevolent specialists (former labor inspectors, for example) who are willing to assist workers. Furthermore, low-income workers are eligible to financial help.

The plaintiff or the defender can appeal the decision of the labor court if the stake is larger than a given threshold (about 5,000 euros in 2006). It is worth noting that 60% of the decisions were appealed in 2004. Among them, 55% of these appeals did not overruled the prud'homme' decision, 30% confirmed it "partially"[5].

In case of an emergency, a summary judgment can be made. However, these judgments are only temporary and might be overruled afterwards. In this paper, we do not consider these summary judgments.

For any given case filed in labor courts, the range of outcome is wide. Hence, we classify cases into six categories. A case can lead to a full tribunal hearing and be lost or won. It can be classified as null and void if the plaintiff has not shown due diligence in the conduct of her case. The case can also be crossed out. This crossing out is less severe than a "null and void" classification. The worker can reinstate her case at the point it has been crossed out and does not have to restart the whole process. This crossing out can be decided by judges but it can also be the outcome of the plaintiff's initiative.[6] A case can either be conciliated during the conciliation step or outside the tribunal with a formal agreement sent to the court.

The motives for suing are multiple. The nullification of a dismissal is asked in the majority of cases (58%)[7]. 21% of plaintiffs ask for some compensation that was not paid by their former employer whereas 9% of plaintiffs do not agree with the level of their severance payment. For most of this paper, we do not distinguish between these different motives.

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[5] Munoz-Perrez and Serverin (2006).
[6] In 2004, only 27% of crossed out cases were reinstated.
[7] In a very vast majority of the cases won by the worker, the worker is not reinstated but receive a compensatory award.

## 2.3  Recent Changes

The legal environment did not change substantially during our sample period (1990-2004).[8] In a relative recent past of an institution officially founded in 1806[9], a 1979 bill radically changed the institutional settings of the Prud'hommes. First, it extended the number of Prud'hommes across France in order to guarantee an equal access among workers. Second, it ended the majority rule for electing representatives which resulted in a more diverse composition of each Prud'homme. Thirdly, it made the Prud'hommes funded by central administration, which is important for us since it gave national rules to the funding and much less reactivity to the local changes in the economic environment.

# 3  Litigation and Firing Cost: a Simple Theoretical Model

We do not study here the theoretical impact of firing costs on labor market variables. This has been extensively examined elsewhere (see Bertola and Bentilola, 1992). We just try to illustrate how the enforcement of labor laws is related to firing costs. Thus, we need to model the incentive for the employer to commit an unfair dismissal and the incentive for the worker to challenge it. We depart from the traditional model of litigation proposed by Priest and Klein (1984) or Bebchuk (1984) to run a cost-benefit analysis similar to the one proposed by Flanagan (1989) for disputes related to the compliance to the National Labor Relations Act in the US. The employer can deliberately choose either lawful or unlawful behaviour in firing a worker. In the latter case, he incurs a lower cost ($c_U$) if the dismissal remains unchallenged by the worker. This cost $c_U$ is lower than the cost of a lawful dismissal $c_L$. Yet the firm has to take into account the probability that the worker files a suit $p_f$ and the probability that the worker prevails at trial $p_w$. There is an uncertainty surrounding the decision of the judge because the firm can disguise the truth -possibly with the help of legal counselling- or because of the potential time-inconsistency of the labor court decisions or the novelty of the case. In case of unlawful behaviour, we write the expected firing cost as:

$$E(c) = p_f\left[p_w(c_L + F) + (1 - p_w)c_U + l\right] + (1 - p_f)c_U$$

Where $F$ is a compensatory award for the worker and $l$ is the firm's litigation cost. The marginal benefit of unfair dismissal of the firm is:

$$MB_{UD} = p_f\left[p_w(c_L + F) + (1 - p_w)c_U + l\right] + (1 - p_f)c_U - c_L$$

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[8] Apart from minor changes related to the application of the working time reduction and the 35 hours workweek.
[9] Prud'hommes can be traced back to the Middle Ages.

As for the worker, he chooses to challenge his unfair dismissal if his expected gain at trial is larger than the unlawful severance payment:

$$p_w(c_L + F) + (1 - p_w)c_U - k - c_U > 0$$

Where $k$ is the cost of litigation for the worker.

Facing an unfair dismissal, the worker sues as soon as:

$$p_w > p_w^* = \frac{k}{(c_L + F - c_U)}$$

Knowing that, the employer dismisses the worker unfairly if:

$$p_w(c_L + F) + (1 - p_w)c_U + l - c_L < 0$$

That is:

$$p_w < p_w^{**} = \frac{c_L - c_U - l}{c_L + F - c_U}$$

As soon as the sum of litigation costs is below the difference in "direct" firing costs (that is $c_L$-$c_U$), there may be 3 equilibriums: a low probability equilibrium where the firm does not comply as she will not be sued in doing so, a medium range $p_w$ equilibrium where the firm does not comply even if she is sued since unlawful behaviours remain less costly and a high range $p_w$ equilibrium where the firm complies given the cost of a lawsuit. An increase in $p_w$ is associated to a shift from one equilibrium to the other along an increasing curve in the firing cost. The filing rate should decrease for high level of $p_w$ since the firm has an incentive to lawful behavior.

We consider a cumulative distribution function $G$ for the probability of worker's victory. We assume that this distribution is the same in each Prudhommes area but that the truncation of this distribution varies over the areas according to institutional factors. A firm willing to fire $L^*$ workers will face the expected firing cost:

$$E(fc) = \left[ G(p_w < p_w^*)c_U + G(p_w^* \leq p_w < p_w^{**})c(p_w) + G(p_w^{**} \leq p_w)c_L \right]L^*$$

Where $c(p_w)$ is an increasing function of $p_w$ bounded by $c_U$ and $c_L$ : $c_U \leq c\left( \overset{+}{p_w} \right) \leq c_L$.

An increase in the worker's litigation cost increases $p_w^*$ since fewer workers are likely to file an unfair dismissal case. An increase in the firm's litigation cost will encourage the firm in lawful behaviors while the firing cost is at its upper bound.

According to the legislator, $F$ compensates the worker for past and future potential wages loss taking into account the difficulty to find a comparable new job. $F$ is likely to be countercyclical of the labor market tightness. During a recession, an increase in $F$ pushes downward $p_w^*$. Cases of lower quality

(e.g. low $p_w$) might be filed. In the same time, a larger award at trial might encourage employers to adopt lawful behaviours. Hence the enforcement of the laws should lead to higher firing cost in a recession[10].



Firing cost

$$c_u \leq \quad p_w c_L + (1 - p_w)c_U + p_w F + l \quad \leq c_l$$

$p_w^{*}$        $p_w^{**}$      $p_w$
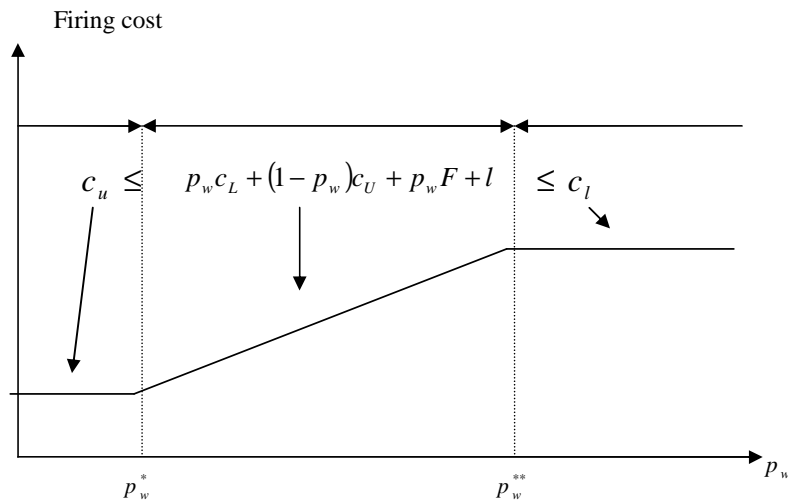
*Firing cost and enforcement of the labor laws*

Aggregating labor flows at the level of the prud'homme's area, we interpret differences in local institutional settings and local characteristics as variations over litigation costs ($k$ and $l$) across areas. Labor judges and judicial clerks involved in labor disputes are unequally distributed over the French territory leading to congested labor courts. This implies an increasing marginal cost of challenging the dismissal following Buchanan's club theory of public goods and thus a decrease in the firing cost through a higher $k$. By contrast, a high union density or the strong presence of hard-line unions might help the worker to file at lower cost (lower $k$). The choice of legal representation influences the expected gain from the judicial process for both parties. Once a case has been filed, the worker and the firm optimize by choosing a lawyer trading off higher probability to prevail against the cost of representation. One might plausibly assume that a larger lawyer density induces a stronger competition among them and a higher rate of return for the use of legal services. When the worker takes a lawyer, it increases his chance of success and this has an unambiguous impact on the firing costs.

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[10] Obviously, judges showing a pro-worker bias when labor market conditions deteriorate will reinforce this effect (see Ichino et alii, 2003).

# 4   Data Set and Descriptive Statistics

## 4.1   Individual Cases Data Set

Our data source comes from administrative records made at the level of each Prud'homme and collected by the statistical department of the French Ministry of Justice. Their primary goal is to monitor the labor courts' activities with an emphasis on speed of treatment. The data source is exhaustive for the period 1990 to 2004. It includes approximately 2 millions of individual cases.[11]

Apart from years 1993, 1994 and 1995, the number of cases treated by labor courts appears to be stable over the period, in stark contrast to what happened in some countries such as the UK where sharp increase in cases took place (see Figure 1 and Burgess, 1999).

For each case, the sex and age of the employee-plaintiff is recorded. There is no precise information on the skill-level in the firm. Nevertheless, the "managers" section of the prud'homme only deals with high-skill employees and managers. Similarly, low-income workers are eligible to financial help (13% of the cases), eligibility can be used as a low-income indicator. Approximately one half of these cases are susceptible of appeal, which implies that the sums at stake are larger than 5,000 euros (in 2005). 53% of the employees are represented by a lawyer.

Concerning firms' characteristics, we know the industry, the size and the location of the employing firm. However, we can only differentiate between firms with more and firms with less than 10 workers. The size of the firm has to be known by labor court judges because labor laws differ for small firms; in particular, they are less stringent and try to ease the financial costs of firing that could hurt them irreversibly. Small firms are overrepresented with 56% of the filed cases whereas they comprise 25% of the labor force.

For each case, the starting date, the ending date, the motives for dismissal, and the court decision are recorded. An average case takes one year (343 days) with a standard deviation of 9 months.

Using the individual cases data set, we are able to compute several EPL indicators for each Prud'homme. The EPL indicator "winning" (resp. "losing", "null and void", "crossed out", "conciliated", "agreement" and "tied") is computed as the ratio of the cases classified as worker's victory (resp. defeat at trial, null and void, crossed out, conciliated, having led to an agreement, having been judged by a professional judge) in year $t$ over the number of cases disposed in year $t$. We also group cases in "agreed" (cases conciliated or having led to an agreement), "dropped" ("null and void"

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[11] We will not consider the 2% of cases involving employers as plaintiffs.

or "crossed out") and "trial" (cases having reached trial). We also compute the worker's victory rate at trial ("victory").

About 60% of cases ended by a trial, among which 75% led to a worker's victory (see Table 1 and 1bis). Despite the mandatory step of conciliation, only 11% of the cases ended at this stage. Taking into account cases that led to an agreement notified to the court or to a withdrawal on the worker's side, at least 20% of the filed cases led to an agreement. 20% is also the proportion of cases having been dropped. All EPL indicators display a very strong variance over time and across Prud'hommes.

Admittedly starting from a high base, we do not observe in France a strong increase in the number of cases brought to the labor courts. In absolute terms, the number of filed cases increased by 10% over the 1990 to 2004 period. The number of filed cases by unemployed workers hovered around five percent over the same period.

Cross-country analyses of EPL are built using aggregate indices ranking countries in terms of labor market flexibility as defined within written legislation. This approach leaves aside the degree of law enforcement, conditional on the rules as well as cyclical variation. Numbers in Table 1bis as well as the very large filing rate (around 25% of dismissals are contested in France) should lead us to conclude that the degree of enforcement of labor regulations is very high in France. Regressing the different indicators of outcomes on local measures of the business cycle shows that the enforcement behavior of these regulations is strongly correlated with the cycle (see Table 2) and that traditional labor regulation indices are highly imperfect in this respect. A high unemployment rate is associated with a high trial rate and a small number of "agreed, conciliated or dropped" cases. By contrast, the worker's victory rate seems to be less cyclical. If the number of unemployed workers is correlated with the number of fired workers, we can compute a filing rate. The same table shows that downturns are characterized by a low filing rate but a high litigiousness, with workers that are less willing to give up their case.

## 4.2  Local Employment Data Set

Local employment flows at the establishment level are computed from the SIRENE files, maintained at the French statistical institute (INSEE). These files give the precise location (city within a "département") for each establishment. We compute a set of Davis and Haltiwinger (1992) indicators over the 1990-2004 period: job creation (both at the extensive and the intensive margin), job destruction (both at the extensive and the intensive margin), and net job creation variables over the 1990-2004 period (using Haltiwanger (1989)'s definitions). These measures are aggregated by industry (service, trade, manufacturing) and size of the establishments (more or less than 10

employees) at the city level as well as at the Prud'homme level, using a 1999 correspondence between cities and Prud'hommes provided by the Ministry of Justice. In comparison with cross-country analyses, these indicators also show a high heterogeneity across periods and the 264 areas.

To measure local unemployment, we use the number of unemployed as registered at the National Labor Agency (ANPE) for each city as well as the city labor force as measured at the 1999 Census. Finally, from 1997 on, we are able to distinguish the reasons for losing one's job (economic or personal dismissal, entry into the labor force, end of temporary contract...)

## 4.3 Election Data Set

The elections for the Prud'hommes are crucial in France -at least for the trade unions- as they are the only way to assess unions' representativeness at the national level. Over the period under review, 4 rounds of elections took place, in 1987, 1992, 1997, and 2002. For each round, we collected the share of votes for each union as well as the number of judges by section at the Prud'homme level. The number of judges did not change from 1993 to 2002 and in our analysis most of the difference in judges is cross-sectional. For the 1992, 1997 and 2002 rounds we have the turnout rates and the number of workers who were enrolled on the electoral lists for each Prud'homme. Union shares of votes are rather stable over time but display a great deal of heterogeneity across Prud'hommes (see Table 3).

## 4.4 Additional Judicial Data

In France, each lawyer has to get licensed and registered at the Bar ("barreau") in order to be entitled to practice. We know the number of lawyers registered at each "barreau" from 1996 to 2006. It allows us to have a local estimate of the number of lawyers by employed worker. As there are fewer bars in France than Prud'hommes (181 versus 264), we match each Prud'homme to the closest bar using orthodromic distance and compute the number of lawyers available to employees depending on one single Prud'homme. Using the 1999 Census, the national average is 77 lawyers per 10000 employees, going from a minimum of 14 (Creuse) to a maximum of 868 (Paris). From our micro data set on Prud'hommes cases, we are able to compute the number of workers who were represented by a lawyer at the labor court. We observe a very high correlation (0.68) between the lawyers' densities computed from these two different sources. Lawyers data cover a shorter period than our other instruments (1996-2004).

In addition, we obtained two other measure of labor laws enforcement: the number of "greffiers" (clerks) employed by the Ministry of Justice attached to tribunals in the area of each "Tribunal

d'instance"[12], closest to the labor court ("Staff" hereafter) over the 1992-2004 period[13] and the number of greffiers directly employed at the local labor court but over a shorter period (1997-2004). "Greffiers" are civil servants in charge of all the administrative tasks, which include assisting the workers in filing their cases as well as writing the judgment terms.

# 5 A Direct Approach

## 5.1 Pooled Regressions

One main issue of the empirical literature on crimes is to test the impact of police forces on crime rates. It is well known that such relationship is plagued by endogeneity since police forces are likely to be allocated where the crime rate is increasing. In this section, our EPL measure is the number of judges in each labor court scaled by the local employment in 1991. We do not have a formal statistical test for the exogeneity of the number of judges working at the Prud'homme. Our point is to show – following the parallel with the police forces- that the number of judges has barely changed in response to an increasing number of unfair dismissal cases and in response to map misallocations.

Given the lack of time variability of our EPL measure -the density of judges- we first present estimates pooling years:

$$Flows_{p,t} = \alpha_{1,1} BC_{p,t} + \alpha_{2,1} BC_{p,t-1} + \alpha_{3,1} EPL_{p,t} + \alpha_{4,1} EPL_{p,t} \times BC_{p,t} + X_P \alpha_p + \alpha_t \gamma_t + \varepsilon_{p,y} \quad (1)$$

Where: $1 \leq p \leq 264$ indices the labor court and $1993 \leq t \leq 2002$ the year.

We directly relate job destruction, job creation, and net job creation rates with the density of judges. In order to reduce the potential problems due to the changes in the number and allocation of judges that took place in 1992 and in 2003, we restrict our pooled cross-section regression to the interim period, 1993-2002. We interact our measure of EPL with our measure of the business cycle (*BC*), the impact of regulation on job flows being potentially larger in a recession. Vector $X_P$ includes controls for the size of the local labor market and the industrial composition of the local areas in terms of industry and firm size (in 1991).

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[12] As there is more "tribunal d'instance" than Prud'hommes (460 versus 264), we use again orthodromic distance for the matching.
[13] Data linearly interpolated for 1993 and 1994.

Clearly, the business cycle *BC* is endogenous and needs to be instrumented: unobserved economic shocks might simultaneously impact the quality of the cases brought to labor court, bias the judges in their decisions, and affect the labor flows. To do this, we instrument the measure of local business cycles (number of unemployed registered at the local employment agency on the 1999 local labor force) by the *national* unemployment rate using the following relation:

$$U_{p,t} = \lambda_p \delta_p + \lambda_t \gamma_t + \mu_p U_{aggregate} + \upsilon_{p,t} \qquad (2)$$

Then, we use the *predicted* value $\hat{U}$ of *U* by (2) to compute our exogenous measure of cycle *BC* as $\left(\overline{U} - \hat{U}\right)/\overline{U}$ where $\overline{U}$ is the average of the *predicted* local unemployment rate $\hat{U}$. When we differentiate the business cycle by industry, we instrument our measure of the local business cycles in the same spirit as above. More precisely, we use the lagged share of local industry employment in the *national* average weighted by the current net job creation in this industry at the *national* level (see Bartik, 1991 or Blanchard and Katz, 1992 for a similar approach).

The number of judges is the outcome of past decisions ("Réforme Boulin", 1979). As already stressed, Prud'hommes' judges are unequally spread over the French territory. Before 1979, the cost of the Prud'hommes was born by the local administration and their creation mostly depended on a bargaining process between unions, firms, and the local administration. For instance, in those years (before 1979) 6 "departments"[14] out of 95 did not have a single labor court. In 1979, a legislation pushed by the Minister of Labor Robert Boulin transformed the financing and made it depend exclusively on central government resources. In addition, at least one labor court had to be present in every zone endowed with a civil tribunal ("Tribunal de Grande Instance"). Since then, every additional change in the number of judges within a labor court or the opening of a new labor court depends on the outcome of a bargaining between the unions, employers' federations, local, and national government. The process is supervised by a national agency ("Conseil national de la Prud'homie"). This system generated strong rigidities with the consequence of essentially freezing the number of judges. This number stayed roughly the same since 1979; every bargaining party preferring the status-quo.

On figure 2, in order to illustrate the dispersion of the Prud'hommes across the French territory, we compare the proportion of the judges working at the local Prud'hommes with the size of the local labor market in 1992. For similar labor market sizes, the number of judges in some Prud'hommes is twice that found in other Prud'hommes. Turning to labor court activity, we plot in figure 3 the average number of cases disposed every year by judges, which can be a measure for judges' productivity. Hence, in some Prud'hommes, judges deal with 10 times more cases than other judges in other Prud'hommes.

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[14] A French "département" is equivalent to an American county.

Judges are elected in December. Some changes took place in 1992 (in comparison with 1987) and in 2002 (see table 6 and 7). Digging into administrative archives of the French Ministry of Labor, the number of cases brought to labor courts seems to be the main apparent quantitative indicator used to decide these changes.[15] Thus, nine labor courts were closed in 1992 because less than 100 cases were examined in a year. However, not all labor courts with less than 100 cases a year were closed. In addition, Figure 4 shows a positive relationship between the 1993 change (from 1987) in the number of judges (expressed as a fraction of judges present in 1987) and judges' productivity (number of cases per judge). Figure 4 also shows that, along a very wide range of judges' productivity, no change took place (30 cases a year per judge being a rough threshold for an increase in the number of judges). We try to give a sense of what might go on in the next lines. Labor courts are divided into 4 "sections" according to the industry of the firm (Agriculture, Retail trade, Manufacturing, Services). Labor court elections in France are the only way to gauge the representativeness of a union and are critical for them. CGT, the most important union in France, is traditionally well represented in manufacturing and is reluctant to accept a reduction in the number of judges allocated to the manufacturing section, even if the share of workers employed in the manufacturing industry has declined in the geographical area.[16] To illustrate this point, we regress (using 1993 data) the local share of judges in a given section on the corresponding share of local employment (see Table 5). We clearly see that there is no significant link between these shares in the manufacturing sector and that the service industry is locally under-represented.

Beyond the congestion and deterrent effects, the number of judges may not matter directly, but through the way cases are ruled at the labor court. A high judge density might mean less labor regulations if adopting a pro-firm stance.

In order to characterize this relationship we first run logistic regressions using our data set of individual cases (see table 8). Controlling for characteristics of the firm, the plaintiff, and the case, we do not find a significant impact of judge density on the worker's victory rate and the "dropped-cases" rate. However, a large judge density is strongly positively associated to a higher trial rate and a lower conciliation rate, which can be interpreted as evidence of stronger regulation.

We complement these results by regressing the Prud'homme's yearly average of each of our potential case outcomes on the Prud'hommes characteristics (see table 9). A larger number of judges is associated to a larger number of cases examined, a larger number of workers' victories, or judged after a tie, but a smaller number of null and void, or crossed out cases. A pattern emerges that allows us to

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[15] In the US, the Administrative Office of the United States Court uses statistics over the average time spent by judges to handle a case of a given type to give an appraisal of judge allocation.
[16] However, some judges were reallocated from a section to another in 2002, mostly from "Agriculture" and "Manufacturing" to "Trade" and "Services".

group the six different potential outcomes of the legal process (see table 10). To summarize, more judges increases the number of trials and worker's victories and decreases the number of dropped cases.

These results are consistent with the fact – described in the sociological literature[17] -- that facing an increasing number of cases and having to meet some productivity requirements, judges tend to be more meddlesome implying crossing out more cases for administrative reasons to speed up the process and lighten their burden. Because it leads to a larger trial rate, a lower number of dropped cases and a higher worker victory rate, we conclude that more judges do lead to stricter EPL restrictions for the firms and that the judge density is a good indicator of the strength of labor regulations.

Staff employed at the Tribunal (expressed again as a fraction of the 1991 local employment) is not strongly correlated to any outcome (only tied cases, see table 9) whereas lawyer density appears to affect the "losing" (negatively) and "dropped" (positively) outcomes (see table 11 & 12. As for the union color influence (CGT is the reference group), areas where the CFDT, CFTC, and CFE receive a large fraction of votes correspond to lower winning rates and higher conciliation rates, in line with the "reformist" reputation that these unions have established. However, caution is granted; endogeneity problems are likely to affect the selection process into trial. For instance, a strong union presence within the local industries and firms induces a strong worker protection inside the firm; only the more litigious cases and workers will go to court.

As shown by the theoretical and empirical literatures (see Bertola, 1992 or Lazear, 1990), EPL should have a much bigger impact on employment dynamics than on average employment rates. Hence, we focus first on labor flows measured at the labor court level.
Going back to the estimates of the labor flow equations, it appears that an increased number of judges is associated with less job destruction and less job creation (Table 13). When we control for labor market size and industrial composition of the local market in 1991, the effect remains significant for job creation (Table 14) and results in the net destruction of jobs. There is no significant cyclical effect of the number of judges on job flows.

Then, we divide the Prud'hommes labor courts into two groups according to the median value of the size of the surrounding labor market (in 1993). The "large size" group accounts for 83% of total employment in 1993. As shown in table 15, the negative impact of Prud'hommes on labor flows is mainly observed in large labor markets with a negative impact on both job destruction and job creation.

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[17] See Bonaffé-Schmidt (1987).

To better understand these first results, we next consider the role of firm size and of industries. There are theoretical, institutional and sociological reasons that make such distinctions meaningful.

Boeri and Jimino (2001) in a partial equilibrium model explain why small firms should be subject to less restrictive labor regulations. Small firms differ from large firms by lower monitoring costs that allow them to offer lower efficiency wages. If the firing costs were the same across firms, small firms would tend to choose a level of employment below the optimal level without job provisions. Hence, workers support less regulation in small firms. Bertola (1992) and Boeri and Garibaldi (2007) underline that the more volatile the business of the firm is the more constraining the firing costs act on the dynamics of the labor flows. Hence, small firms and service industries should suffer more from high firing costs. Moreover, as argued by Kahn (2007), industry affiliation tends to be related to demographics. New entrants (women, young workers, and possibly immigrants) are less likely to have found a good match, hence in an industry with a lot of young workers, there will be more performance-related discharges and thus more potential cases that will go to labor courts.

In France, a dismissal deemed unfair by the judge is compensated by a sum which cannot be lower than 6 months pay, for workers employed a firm with more than 10 employees. Below this threshold, the compensation is left to the discretion of the judges. In addition, when the firing process is deemed unlawful because the advance notice period or the various mandatory meetings were not satisfactorily set up by the employer, the fines are less severe for small firms than for large firms. Sociological studies also show that the body of the judges on the employer side is made of small business owners with a more practical approach of the law enforcement. On the contrary, the body of judges on the employee side mostly comprises union members of large firms with a very formal approach. Looking at the worker's victory rate at trial based on our individual-level dataset, it is higher in small firms (76% against 70%). Despite this high victory rate at trial, workers in small firms are more likely to follow a conciliation procedure and only a small proportion of cases lead to a tie (see table 16).

Following on this dichotomy, Prud'hommes have a more negative impact on the magnitude of labor flows in small establishments than in the larger ones (see table 17). Even though labor regulation is less strict vis-à-vis small firms, the higher employer losing rate appears to show up in decreased destructions and creations when the number of judges in charge of small establishments increases. Furthermore, as small-size establishments exhibit larger labor flows in absolute magnitude, these establishments tend to be more constrained by regulation. In addition, despite having lower monitoring costs, small establishments' lack of judicial knowledge and human resources expertise reinforces the binding effect of labor regulations. Indeed, over the period, the share of small establishments within all cases brought to the labor courts has increased from 40% to almost 90% (see figure 5). This change

can be interpreted as increasing regulations towards small firms. By contrast, it is often interpreted as a successful "escape from labor courts" strategy by large firms which face such stringent regulations and penalties. This strategy appears to be implemented by pre-separation bargaining and large separation costs (see Kramarz and Michaud, 2007). Indeed, labor courts also reduce both job creations and destructions in large firms in large areas (again table 17).

To analyze differential effects between industries, we "exogenize" our business cycle measure à la Bartik (1991), that is we use the national aggregate of net job creations by industry weighted by the lagged local share in each industry. Estimates show that the effect of Prud'hommes is concentrated in the trade and service industries (see table 18). This results in significant net destruction of jobs in the trade industry. Table 19 shows that worker's victory rates are very similar across industries. The service industry appears to be characterized by a lower trial rate whereas manufacturing industry generates more cases, with low rates of conciliation, agreement, or dropped cases and a high rate of tied cases. However, it does not seem to affect labor flows in manufacturing.

As an additional check, we looked at the change in job flows between year 1992 and year 2002 as a way to eliminate the fixed unobserved heterogeneity across Prud'hommes between both years. We relate this change on the number of judges, controlling for the local industry characteristics in 1991. Results are presented in Table 20. The number of judges has a pronounced effect in reducing both job destruction and creation between both years in the large labor markets. It also reduces overall net job creation.

## 5.2 Prud'hommes Fixed Effects

Until now, we essentially used the cross-sectional variation to identify the effects of EPL on labor flows. This was justified by the virtual absence of changes in the number of judges over the 1993-2002 analysis, in the face of constant restructuring of the labor market, in particular across industries. However, the presence of controls for local industrial composition in these pooled regressions may not be enough to control for local characteristics. The addition of labor courts fixed effects should allow us to better account for unobserved local effects that might be correlated with both Prud'hommes characteristics and local job flows without biasing estimated effects. The judges' effect is thus identified through the changes that took place in 1993 and 2003. Results presented in table 21 show that an increase in the number of judges appears to entail smaller job destruction resulting in higher net job creation. However, the changes in the number of judges were quite small over the period, and those that took place between 1993 and 2003 are likely to be a non-random selection. We cannot escape the question of instrumentation. The next section presents another strategy of identification of the impact of enforcement of laws but through the use of instrumental variables.

# 6 Instrumental strategy

Given the lack of variability of the number of judges over the period, we use - in order to deal with unobserved heterogeneity- as measures of enforcement related firing cost the local filing rate and the fraction of workers and firms represented by a lawyer[18]. In our theoretical model, higher filing rate is related to lower litigation costs *(k)* for the worker and lower litigation costs for the firm *(l).* The choice of representation results from an optimizing program of the worker. A lawyer improves his probability to prevail at trial and raises the expected cost of the claim for the firm and thus implies higher firing costs (e.g. larger firing cost within [ $p_w^*$, $p_w^{**}$ ]).

Job flows might modify workers' and firms' litigiousness. In order to obtain a causal effect, we instrument the filing rate and the legal representation using various potential instruments: lagged average durations of a case, lawyer, judge and clerk densities.

We define the filing rate as the number of cases **filed** in year *t* over the number of unemployed listed at the local unemployment agency (ANPE) in year *t*. The number of unemployed includes some dismissed workers but it may also include some quitters as well as some new entrants. From 1997 on, we are able to distinguish the reasons for unemployment (economic or personal dismissal, entry from out of the labor force, end of temporary contract...). Of course, this indicator is only a proxy of the number of potential plaintiffs since one can sue a firm without being on the lists of the ANPE. In order to minimize this bias, we restrict attention to those plaintiffs that are suing their firm in order to obtain a nullification of their firing. The proportion of workers and firms represented by a lawyer is defined for each case whether it reaches the trial stage or not.

We consider now the following set-up:

$$Flows_{p,t} = \alpha_{1,1}BC_{p,t} + \alpha_{2,1}BC_{p,t-1} + \alpha_{3,1}EPL_{p,t} + \alpha_p\delta_p + \alpha_t\gamma_t + \varepsilon_{p,y} \qquad (3)$$

$$EPL_{p,t} = \beta_{1,1}BC_{p,t} + \beta_{2,1}BC_{p,t-1} + \beta_{3,1}Z_{p,t} + \beta_p\delta_p + \beta_t\gamma_t + u_{p,y} \qquad (4)$$

Where *p*, $1 \le p \le 264$ denotes the labor court and *t*, $1997 \le t \le 2003$, denotes the year. $Z_{p,t}$ denotes our set of instruments.

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[18] We have unsuccessfully tested the hypothesis that the timing of the elections impacts the behavior of the judges in their decision of being more pro-worker or to distinguish themselves from judges affiliated to other unions. Though, it was also likely that inexperienced judges that were just elected are likely to behave differently. The respective shares in votes going to each union tend to capture specific traditions in industrial labor relations. For example, CGT often selects an aggressive stance whereas CFDT is more prone to conciliation. CGT is traditionally more represented in dense manufacturing areas where left-wing parties –and employment protection- are widely represented.

## 6.1 Filing Rate and Legal Representation

We instrument the filing rate by the lagged average duration of a case. Like our judge density indicator, we can interpret the duration as an indicator of congestion. The time it takes to judge or to conciliate a case is likely to depend on the resources available in each labor court. We assume that this indicator has a more deterrent effect on the worker incentive to file than on the firm incentive to comply and thus is decreasing with the strictness of the labor regulation. Our micro data set on labor court cases provides us with several useful dates: date of filing of the case, date of the first attempt to conciliate the parties, date of the first hearing, and date of termination of the case. We computed for each labor court and each year various averages: total duration, duration before the first attempt to conciliate, duration between this attempt and the start of the trial, and duration between the start and the closing of the trial. All these durations display negative correlation with judges' density. Changes in duration at various stages of the trial are likely to be driven by exogenous factors, such as changes in administrative resources available to the local court, in particular the Tribunal d'Instance. Such changes should be orthogonal to changes in labor flows.

We use the lawyer density as a proxy for workers' litigiousness. A large supply of lawyers should make workers more likely to sue their employer as it implies a lower cost of search and a lower price of legal representation due to a greater competition (see Posner, 1997). We might suppose that lawyer density reflect lawyer location preferences unrelated to the incidence of litigation. The barriers to entry in the lawyer profession and their lack of geographic mobility is likely to make variations in supply of lawyers mostly driven by factors specific to the regulation of the profession and dynamism of the local bar, exogenous to labor flows and their variation.

The first stage of our instrumental regression show as expected that the filing rate is positively related to the lawyer density and negatively related to a lagged average duration of the case ($F=12.5$). A larger filing rate lowers job flows volatility resulting in net job creations (table 23). Hansen 's test support the statistical validity of our 2 instruments.

OLS estimates show that the use of a lawyer is positively related to the winning rate of both parties and to the hardening of the judicial process with a larger number of trials and fewer dismissed cases. It is also associated with less job destructions and at least for the legal representation of the firms with more job net creations (see Table 23 & 24). Turning to 2SLS estimates (see Table 25), the fraction of workers using a lawyer is strongly and positively related to the densities of judges, clerks and lawyers ($F=7,26$). A high fraction causes fewer job destructions and job creations resulting here again in job net creations. The instruments used for the fraction of firms using a lawyer are rather

weak –only the clerks' density being significant in the first-stage. Lawyers representing the firm also depress job flows volatility. Hansen's test support the statistical validity of our 3 instruments.

## 6.2 Predicted Number of Cases Brought to Prud'hommes

As mentioned earlier, the number of judges barely changed over our sample period. Indeed, it changed a little. From one year to another though, when it moved, the number of judges was likely to change according to the number of cases brought before the court. Then, on the employee side, if the number of judges is sufficiently high, workers have a larger incentive to sue, anticipating a faster judicial process. As a consequence, the labor court is likely to be increasingly congested, until a point at which the level of congestion will discourage potential plaintiffs. Similar reasoning can be made for the employer side.

In order to abstract from these local dynamics and construct an exogenous measure of changes in labor court supply, we predict the local number of cases using the national number of cases as well as a base year industrial and firm size composition (again in the spirit of Bartik). Over the nineties, France was affected by a tremendous shift from manufacturing to services and trade. Using the SIRENE database and the Prud'hommes classification, we observe a decrease in cases of 21% in the manufacturing industry and a decrease of 5% and 8% respectively in the trade and the service industry over the 1993 to 2002 period[19]. We also use the rocketing share of small firms involved in Prud'hommes cases, a clear and strong national trend; the share going from 40% in 1990 to almost 90% in 2001.

We use the following EPL indicator that we directly –with a one period lag-- include in the labor flow regressions:

$$EPL_{t,p} = \frac{Judges_{t,p}}{\Pr edicted\ Number\ of\ Cases_{t,p}}$$

Where $Predicted\ Number\ of\ Cases_{t,p} = \sum_{j=1}^{3}\sum_{k=1}^{2} f_{1990,j,k,p} * cas_{t,j,k,agg}$ and $f_{1990,j,k,p}$ is the proportion of cases belonging to industry j and from firm size k at the prud'homme p of the national aggregate in 1990. $cas_{t,j,k,agg}$ is the number of cases brought to court at the national level in year $t$ and in the $j,k$ cell. This measure is a very good predictor of the number of local cases ($F=50$ when regressing the actual number of cases over the predicted number including fixed effects and year indicators) although We can not exclude that even the pre existing industry-size structure may affect flows directly and limits our identification strategy.

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[19] Not considering the manager section for which we do not have the industry information, the number of cases brought to the manufacturing trade and services sections increased by 25%, 66% and 81% respectively over the same period (keepind in mind that the 1993 starting point is an unusually low level of number of cases ).

The job destructions are hindered by a high number of judges and this impact is amplified with the size of the labor market and the business cycle. As no significant effect is seen on job creation, the overall effect of regulations, as measured by our judge indicator, is to cause an increase in net job creations (table 26).

# 7 Employment Rates and Labor Court

We now turn to the impact of the enforcement of labor regulation on labor market stock variables. Theoretical literature and empirical evidence point out the negative impact of EPL on employment rates particularly among the low-skilled workers. In a simple matching model Cahuc and Zylberberg (2004) show that firing costs decrease labor market tightness and the expected utility of an unemployed by reducing the employment rate. With an even simpler argument, Kuegler and Saint-Paul (1999) states that making firing more costly discourages hiring of less experienced, less educated workers or long term unemployed since, in an asymmetric information framework, they send a negative signal upon their productivity. As recently shown by Kahn (2007) who used a 1994-98 International Adult Literacy Survey (IALS) microdata combined with OECD EPL indices, EPL decreases the employment incidence of less experienced and less skilled individuals.

In order to test the impact of EPL on employment rates, we use multiple waves of the French Labor Survey. In March of every year the French Statistical Institute (INSEE) conducts a Labor Force Survey (*Enquête sur l'Emploi*), interviewing roughly 130,000 people who are asked a set of standard questions. In particular, we know for each individual his or her "département" of residence. We use the Labor Force Survey for the years 1990 to 2001. So, for each département and year, we construct averages of the following variables: employment-to-population rates by sex, age, and level of education, share of workers in temporary jobs, share of workers employed part-time but would rather work full time. From the French Public Employment Service, we obtain the share of long-term unemployed (unemployed for more than one year). Our business cycle indicator is the regional change in GDP[20] as computed by INSEE.

We find strong differences between small and large labor market areas (see tables 27 and 28). In small département, a high judge density corresponds to higher employment rates and lower unemployment rates. By contrast, in large labor market areas that account for 82% of 1991 total employment, a high judge density is associated with lower employment rates, large unemployment rates, and more part-

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[20] There are 22 régions in Metropolitan France. Each region is composed by approximately 4 « départements »

time jobs. Adding département fixed effects (see table 29) leads to results that are similar to those obtained for the large labor market areas. More judges decreases the employment rate, increases the unemployment rates as well as the proportion of temporary jobs and long-term unemployment.

We also compute relative employment rates. For instance, the relative female employment rate is defined as the ratio of the female employment rate to the male employment rate. The relative employment rate by age group is defined relatively to the employment rate for the 35 to 49 age group. For large labor market areas or using labor court fixed effects, our findings are in line with cross-countries studies in which more EPL is found in countries with lower employment rates, in particular among the less educated. Our estimates show that more regulation depresses the relative female employment rate as well as that of the less educated. Higher educated worker increase their employment rates relative to lower educated workers when judge densityincreases. These results are parallel to those obtained using our individual data set which showed that female workers and non-managers are more likely to win at trial: these categories of workers are more likely to suffer from a high judge density.

# 8 Reform of the Judiciary Map

In 2007, following the political platform of the newly elected French President Nicolas Sarkozy, the French Minister of Justice Rachida Dati undertook a reform of the judiciary map. We take the opportunity of this reform to assess –given our estimates- what impact the reallocation of judges or closing down some of the less active Prud'hommes has on labor market flows. Preliminary rounds of bargaining between local authorities, unions, and central administration led to the decision of closing down 63 labor courts, implying the reallocation of 989 judges, about 15% of the number of judges. These judges will be reallocated where they are supposedly "most needed" without any further precision.

The small number of cases filed every year has been the main criterion for justifying a closure. However, some of these Prud'hommes had a higher average number of filed cases (over the 1990 to 2004 period) than some that will remain in operation. We use the estimates given by our pooled-regressions on the 1993 to 2002 period. The average number of cases and the 1991 employment of the closed Prud'hommes are allocated to the nearest Prud'homme. As a rule of reallocation of judges among Prud'hommes, we minimize the average productivity weighted by the average number of filed cases.

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The 989 judges are then allocated among 66 Prud'hommes for a weighted average judge productivity of 24 cases a year (and 31 cases a year before the reform). 64 of these Prud'hommes are in large labor market areas.

Using estimates of table 13 and average of local employment over the last 5 years, the reform is estimated to prevent 15,000 job creations (or 0.3 % of the total employment of the areas where new judges are allocated) and 20,000 job destructions (respectively 0.4 %). At first glance, one might conclude that these figures are small relatively to the workers' welfare gain of the enforcement of labor laws on unfair dismissals.

# 9 Conclusion

The impact of EPL on labor market performance has most often been assessed through cross-country analyses which make it hard to control for all various potential interactions between the labor market institutions. Within country analyses have most often used difference-in-difference estimators and tended to ignore the extent to which EPL was enforced and acted as a binding constraint for the firm or the worker. Both of these strands do not address the problem of EPL endogeneity. By contrast, to measure EPL in France --a country with a highly regulated labor market—we use the local implementation of those institutions specifically in charge of EPL enforcement: the labor courts (Prud'hommes). Using micro-data on individual cases filed to the Prud'hommes, we show that this measure can be interpreted as a stricter labor regulation. We also show that judges are largely mis-allocated across the French territory and this allocation is plausibly exogenous. Our pooled regressions –based on the variation in local supply of judges across the territory—tend to show that EPL reduces labor flows volatility. The impact is amplified in large areas and in the trade and service sectors. Our fixed effects analysis shows that increased EPL hampers job destruction more than job creation, even leading to net job creation. This result is confirmed by our IV estimates. Using the French LFS labor flows together with our measures aggregated at the département level, we find that judge density significantly decreases employment rates among female and low-educated workers.

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Fig 1: Number of filed cases
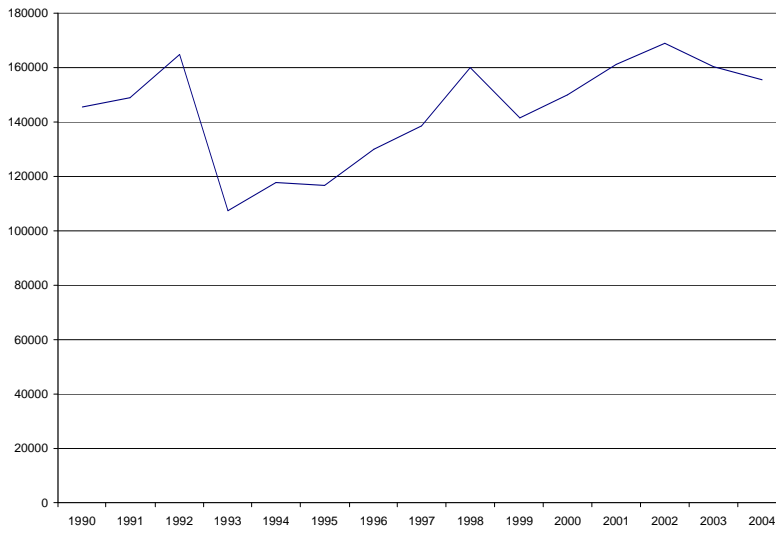


Sources: Prud'hommes data from Ministry of Justice.

Figure 2: Allocation of judges
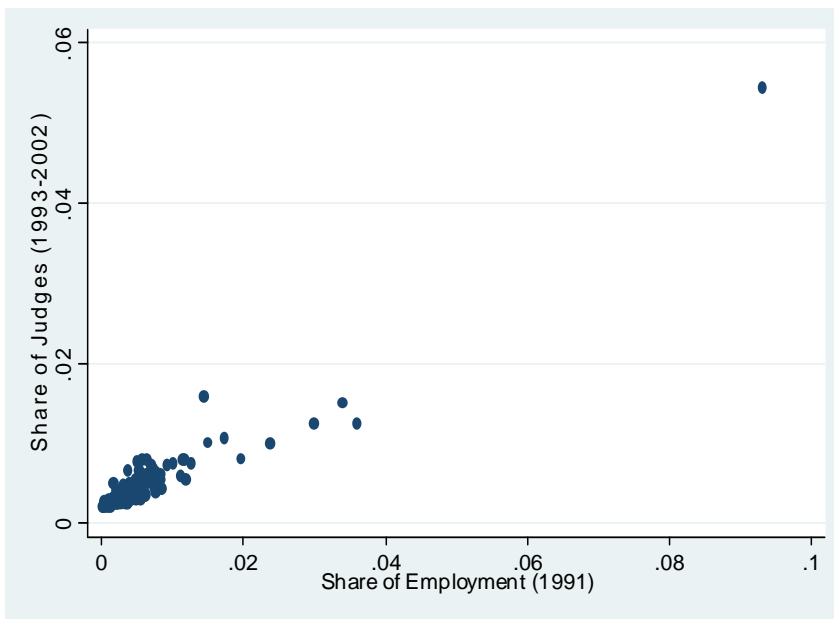


Sources: Election data from Ministry of Labor. Employment data from the Insee Sirene files on establishments.

Figure 2bis: Allocation of judges (without largest Prud'hommes)



Sources: Election data from Ministry of Labor. Employment Data from the Insee Sirene files on establishments.

Figure 3: Productivity of judges across Prud'hommes



Sources: Election data from Ministry of Labor. Employment Data from the Insee Sirene files on establishments.

Fig 4: Change in judges in 1993 and productivity of judges



Sources: Election data from Ministry of Labor. Employment Data from the Insee Sirene files on establishments.

Fig 4bis: Change in judges in 1993 and productivity of judges



Sources: Election data from Ministry of Labor. Employment Data from the Insee Sirene files on establishments.

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Figure 5: share of small establishment cases
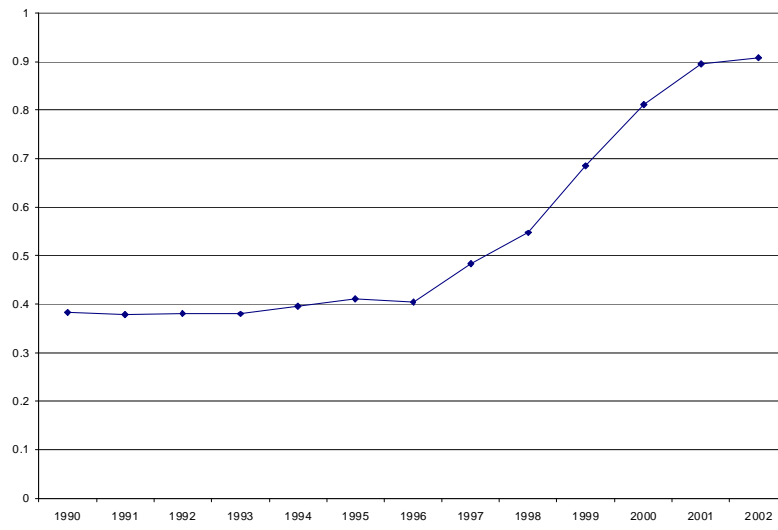


Sources: Prud'hommes data from Ministry of Justice.

Table 1: Case outcomes: definition of variables

| Names | Definition |
|---|---|
| Winning | Number of workers' victories at trial over total number of cases |
| Losing | Number of workers' defeats at trial over total number of cases |
| Null and Void | Number of cases classified as "Null and Void" over the total number of cases |
| Crossed Out | Number of cases classified as "Crossed out" over the total number of cases |
| Conciliation | Number of cases conciliated through the mandatory conciliation step over the total number of cases |
| Agreement | Number of cases having led to an agreement notified to the judge over the total number of cases |
| Tied | Number of cases having led to a professional judge's decision over the total number of cases |
| Dropped | (Null and Void +Crossed Out)/(Total number of cases) |
| Agreed | (Conciliation +Agreement)/(Total number of cases) |
| Trial | (Winning+Losing)/(Total Number of Cases) |
| Victory | (Winning)/(Winning +Losing) |

Table 1bis: Summary statistics: case outcomes

| Case Outcome | Mean* | Std. | Min | Max |
|---|---|---|---|---|
| Winning | 0.45 | 0.09 | 0.00 | 0.93 |
| Losing | 0.15 | 0.06 | 0.00 | 0.78 |
| Null and Void | 0.06 | 0.05 | 0.00 | 0.62 |
| Crossed Out | 0.13 | 0.08 | 0.00 | 0.74 |
| Conciliation | 0.11 | 0.06 | 0.00 | 0.78 |
| Agreement | 0.10 | 0.06 | 0.00 | 0.73 |
| Tied | 0.06 | 0.06 | 0.00 | 0.77 |
| Dropped | 0.20 | 0.09 | 0.00 | 0.75 |
| Agreed | 0.20 | 0.09 | 0.00 | 0.81 |
| Trial | 0.60 | 0.10 | 0.13 | 0.95 |
| Victory | 0.75 | 0.09 | 0.00 | 1.00 |

Sources: Prudhommes data from Ministry of Interior.
*We first compute the proportion of cases with outcomes $i$ in year $t$ at the Prud'homme level using the data set of individual cases collected from 1990 to 2004 by the French Ministry of Justice. We then take the means of these proportions over the 264 Prud'hommes over the 1990-2004 period.

Table 2: Case outcomes and the business cycle

| Outcome variable: | Local Unemployment Rate | Local Unemployment Rate (-1) | R-squared |
|---|---|---|---|
| Winning | 0.184 | 0.856*** | 0.39 |
| | (0.16) | (0.16) | |
| Losing | 0.157 | 0.0506 | 0.28 |
| | (0.10) | (0.10) | |
| Null and Void | 0.236*** | -0.613*** | 0.37 |
| | (0.073) | (0.074) | |
| Crossed Out | -0.301** | 0.331** | 0.53 |
| | (0.12) | (0.13) | |
| Conciliation | -0.457*** | 0.150* | 0.54 |
| | (0.095) | (0.082) | |
| Agreement | 0.180* | -0.774*** | 0.31 |
| | (0.10) | (0.12) | |
| Tied | -0.404*** | 0.370*** | 0.33 |
| | (0.095) | (0.099) | |
| Dropped | -0.0648 | -0.283** | 0.50 |
| | (0.13) | (0.14) | |
| Agreed | -0.276* | -0.624*** | 0.46 |
| | (0.15) | (0.15) | |
| Trial | 0.341** | 0.907*** | 0.41 |
| | (0.16) | (0.17) | |
| Victory | -0.143 | 0.305** | 0.31 |
| | (0.15) | (0.15) | |

Sources: Prud'hommes data from Ministry of Justice. Others from Insee.

Each row displays the regression of an outcome variable on the current and lagged local unemployment rate and Prud'hommes fixed effects. The local unemployment rate is defined as the number of unemployed enrolled at the local branch of the National Employment Agency (ANPE) over the 1999 census local workforce. Robust standard errors in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table 3: Share of vote of unions

| Union | Mean | Std | Min. | Max. |
|---|---|---|---|---|
| CGT | 37% | 11% | 0% | 71% |
| CFDT | 28% | 10% | 0% | 63% |
| FO | 22% | 7% | 0% | 50% |
| CFE-CGC | 8% | 4% | 0% | 21% |
| CFTC | 4% | 6% | 0% | 44% |

Sources: French Ministry of Labor
Number of observations: 1056 (264 Prud'hommes over 4 electoral terms)

Table 4: Breakdown of judges and employment by industry[1]

| | 1990-1992[2] | | 1993-2002[2] | |
|---|---|---|---|---|
| | Employment | Judges | Employment | Judges |
| Manufacturing | 35% | 41% | 53% | 37% |
| Trade | 47% | 33% | 36% | 36% |
| Service | 18% | 26% | 11% | 27% |

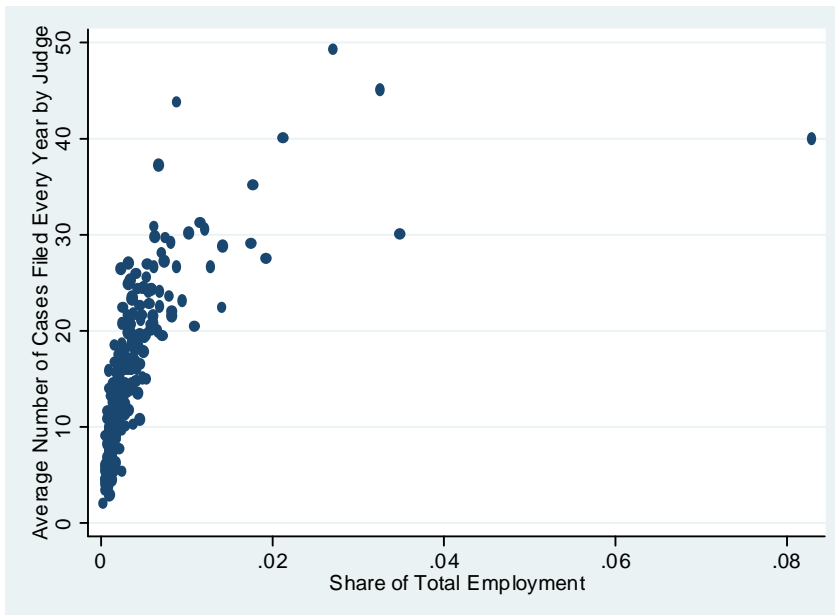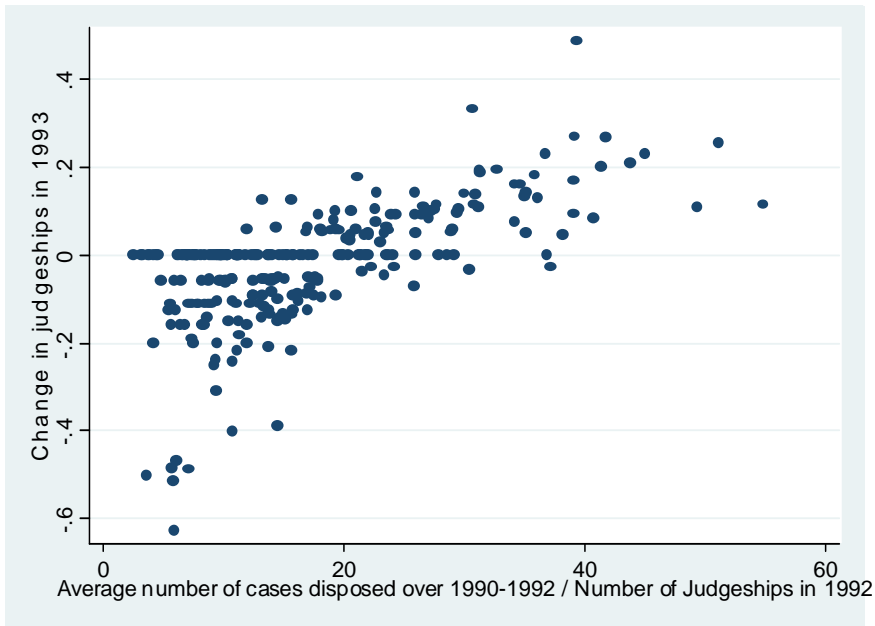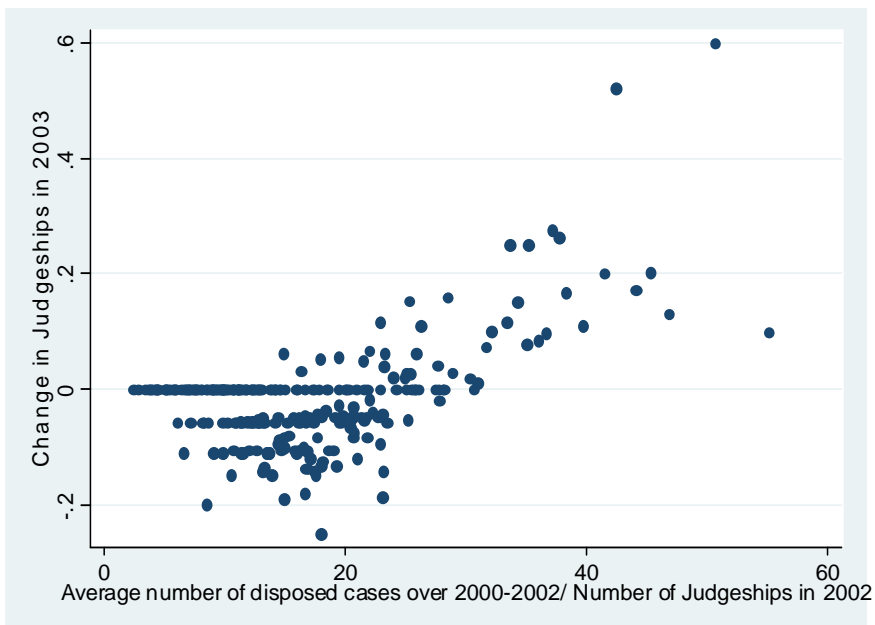Sources: Election data from Ministry of Labor. Employment Data from the Insee Sirene files on establishments.
Number of observations: 264 Prud'hommes
[1]A change in French classification of products occurred in 1993.
[2]Proportion are averaged out over the period under review

Table 5: Misallocation of judges by industry

| Dependent variable: 1993 local share of judges in the industry | Manufacturing | Trade | Service |
|---|---|---|---|
| 1993 local share of employment in the industry | 0.00156 | 0.203*** | -0.451*** |
| | (0.014) | (0.015) | (0.031) |
| Observations | 264 | 264 | 264 |
| R-squared | 0.00 | 0.19 | 0.21 |

Sources: French Ministry of Labor, Insee Sirene Files
Columns (2) (3) and (4) display the regressions of the proportion of local number of judges allocated to industry $i$ in the national aggregate on the corresponding proportion of employment.
Standard errors in parentheses*** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table 6: Number of judges by section and change over the electoral terms

| | Number of judges in 1987 | Change in % between term t and term t-1 (t/t-1) | | |
|---|---|---|---|---|
| | | 1992/1987 | 1997/1992 | 2002/1997 |
| Manufacturing | 2213 | -15 | 0 | -9 |
| Service | 1266 | 0 | 0 | 11 |
| Trade | 1831 | 5 | 0 | 1 |
| Management | 1278 | 10 | 0 | 4 |
| Total | 6588 | -1 | 0 | 1 |

Sources: French Ministry of Labor.

Table 7: Breakdown of change in the number of judges across the 264 Prud'hommes

| | 1992 Election | | | 2002 Election | | |
|---|---|---|---|---|---|---|
| | Manufacturing[1] | Service | Trade | Manufacturing | Service | Trade |
| lost 3 judges or more | 17 | 4 | 4 | 7 | 0 | 0 |
| lost 2 judges | 17 | 0 | 0 | 8 | 0 | 0 |
| lost 1 judges | 16 | 2 | 6 | 27 | 1 | 25 |
| no change | 44 | 85 | 58 | 56 | 79 | 58 |
| gained 1 judges | 3 | 5 | 17 | 1 | 9 | 9 |
| gained 2 judges | 1 | 2 | 10 | 1 | 5 | 3 |
| gained 3 judges or more | 1 | 2 | 6 | 0 | 6 | 4 |
| | 100 | 100 | 100 | 100 | 100 | 100 |

Sources: French Ministry of Labor.
[1]Read as % of Prud'hommes that lost (or gained or no change) x judges in the election year $t$

## Table 8: Logit model for case outcomes

| | (2) | (3) | (4) | (5) | | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|---|---|---|---|
| | **Case outcomes** | | | | | | | | |
| | Agreed | Trial | Dropped | Victory | | Agreed | Trial | Dropped | Victory |
| Judges | -49.77*** | 39.62** | -15.26 | -4.646 | Representative (Lawyer): | | | | |
| | (16.5) | (16.3) | (15.3) | (11.3) | Missing | 0.314*** | -1.856*** | 1.627*** | 0.208*** |
| Age (37-49): | | | | | | (0.061) | (0.14) | (0.12) | (0.059) |
| Missing | -27.28*** | 10.91*** | -1.249 | -11.61*** | Union | 0.194*** | -0.0652 | -0.0942 | -0.107*** |
| | (4.90) | (2.73) | (0.82) | (0.028) | | (0.039) | (0.064) | (0.061) | (0.027) |
| 15-24 | 0.0560*** | -0.0923*** | 0.00155 | 0.295*** | Others | 0.405*** | -0.246** | -0.262** | -0.0820 |
| | (0.016) | (0.016) | (0.016) | (0.017) | | (0.056) | (0.10) | (0.11) | (0.056) |
| 25-36 | -0.00527 | -0.0116 | 0.00389 | 0.130*** | No representative | 0.189*** | -1.234*** | 1.067*** | -0.161*** |
| | (0.014) | (0.012) | (0.013) | (0.012) | | (0.050) | (0.14) | (0.10) | (0.029) |
| 50+ | 0.0274* | 0.0125 | -0.0313** | -0.0495** | Juridictions (Unfair Dismissal): | | | | |
| | (0.016) | (0.011) | (0.014) | (0.024) | Redundancy | -0.0866* | 0.142*** | -0.114** | -0.0700** |
| Duration | -0.00726*** | 0.00244*** | -0.0000960 | -0.000330*** | | (0.046) | (0.045) | (0.049) | (0.034) |
| | (0.00048) | (0.00068) | (0.00023) | (0.000071) | Deduction of wages | 0.132*** | -0.258*** | 0.163*** | 0.00509 |
| Judicial Assistance Benefit | -0.195*** | 0.541*** | -0.554*** | -0.0125 | | (0.044) | (0.046) | (0.039) | (0.033) |
| | (0.044) | (0.033) | (0.040) | (0.021) | Disciplinary | 0.302*** | -0.316*** | 0.114** | -0.330*** |
| Firm Size (Small): | | | | | | (0.042) | (0.050) | (0.055) | (0.042) |
| Missing | 0.0242 | -0.0889** | 0.0571* | -0.0612** | Bankruptcy | -1.102*** | 0.571*** | -0.000624 | 0.300*** |
| | (0.062) | (0.042) | (0.030) | (0.028) | | (0.068) | (0.082) | (0.086) | (0.037) |
| Large | 0.0396 | -0.0218 | -0.0181 | -0.265*** | Missing | -0.141** | -0.253*** | 0.344*** | -0.00970 |
| | (0.043) | (0.032) | (0.029) | (0.051) | | (0.068) | (0.060) | (0.093) | (0.099) |
| Gender (Male): | | | | | Union Share of votes (CGT): | | | | |
| Female | 0.220*** | -0.102*** | -0.0509*** | 0.0613*** | FO | 0.526* | -0.150 | -0.302 | -0.407** |
| | (0.016) | (0.015) | (0.013) | (0.013) | | (0.32) | (0.28) | (0.27) | (0.17) |
| Job Destructions | -0.430 | 0.0319 | 0.604*** | 0.0307 | CFDT | 1.362*** | -0.815*** | -0.268 | 0.0996 |
| | (0.39) | (0.38) | (0.20) | (0.23) | | (0.28) | (0.22) | (0.24) | (0.17) |
| | | | | | CFTC | 0.205 | -0.968** | 0.803** | 0.0934 |
| | | | | | | (0.44) | (0.39) | (0.37) | (0.29) |
| Observations | 1055359 | 1055359 | 1055359 | 628396 | Observations | 1055359 | 1055359 | 1055359 | 628396 |

Sources: Prud'hommes Data from French Ministry of Justice. Job Destructions from the Sirene files on establishments.

*Column (2) to (5) display results from logistic regressions at the individual level where the dependent variable is the case outcome. "Judges" is the ratio of the judges at the Prud'hommes level over the local employment. Year indicators are added. The omitted category for each polytomial variable is in parenthesis.

Table 9: Case outcomes and judge density

| Dependent variable: | Winning | Losing | Null and Void | Crossing out | Conciliation | Agreement | Tied |
|---|---|---|---|---|---|---|---|
| BC | 0.0643 | 0.0332 | -0.00962 | -0.00143 | 0.0130 | -0.0995* | 0.0281 |
| | (0.079) | (0.052) | (0.044) | (0.061) | (0.042) | (0.052) | (0.056) |
| BC(-1) | -0.0265 | -0.0406 | -0.0102 | -0.0441 | 0.0236 | 0.0979 | -0.0319 |
| | (0.095) | (0.063) | (0.043) | (0.088) | (0.055) | (0.072) | (0.053) |
| Judges | 15.01*** | -3.329 | -3.584* | -10.43* | -2.296 | 4.630 | -0.120 |
| | (4.95) | (3.35) | (1.91) | (5.54) | (3.26) | (3.43) | (3.16) |
| Staff | 2.082 | -0.139 | 1.162 | -0.390 | -1.049 | -1.666* | 3.031*** |
| | (1.76) | (0.95) | (0.87) | (1.80) | (1.24) | (1.00) | (1.05) |
| %union share | | | | | | | |
| FO | -0.0664 | 0.0632** | -0.0167 | -0.0668 | 0.0643 | 0.0223 | -0.150*** |
| | (0.054) | (0.027) | (0.020) | (0.054) | (0.040) | (0.026) | (0.027) |
| CFDT | -0.0957** | -0.0479** | -0.0173 | -0.0651 | 0.160*** | 0.0661*** | -0.0678** |
| | (0.040) | (0.021) | (0.017) | (0.046) | (0.027) | (0.024) | (0.026) |
| Others | -0.0810* | -0.0902*** | 0.0173 | 0.128*** | 0.0458 | -0.0201 | -0.0779*** |
| | (0.041) | (0.024) | (0.021) | (0.044) | (0.029) | (0.022) | (0.026) |
| R-square | 0.06 | 0.05 | 0.05 | 0.05 | 0.09 | 0.07 | 0.06 |

Sources: Prud'hommes data from French Ministry of Justice, others from Insee

Additional controls: Year indicators. BC is a business cycle indicator computed as follows: we regress the local unemployment rates on the national aggregate including year and Prud'hommes fixed effects. Using this regression, we compute the predicted values of the local unemployment rate by the national aggregate. BC is the deviation in % of the average predicted values from the predicted values. "Judges" is the number of judges at the Prud'hommes level divided by local employment in 1991.

Observations: 2,640; Number of Prudhommes: 264

Robust standard errors, clustered at the Prud'hommes, between parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table 10: Case outcomes and judge density; grouped outcomes

| Dependent variable: | Win | Agreed | Dropped | Trial |
|---|---|---|---|---|
| BC | -0.00684 | -0.0865 | -0.0111 | 0.0976 |
| | (0.077) | (0.069) | (0.062) | (0.082) |
| BC(-1) | 0.0104 | 0.121 | -0.0544 | -0.0671 |
| | (0.090) | (0.094) | (0.089) | (0.11) |
| Judges | 10.05** | 2.334 | -14.01** | 11.68** |
| | (4.82) | (4.64) | (5.58) | (5.25) |
| Staff | 1.131 | -2.716* | 0.773 | 1.943 |
| | (1.47) | (1.47) | (1.72) | (1.79) |
| | | | | |
| %union share | -0.0988** | 0.0867* | -0.0835 | -0.00317 |
| FO | (0.042) | (0.045) | (0.055) | (0.053) |
| | 0.0161 | 0.226*** | -0.0824* | -0.144*** |
| CFDT | (0.034) | (0.037) | (0.046) | (0.042) |
| | 0.0836** | 0.0257 | 0.145*** | -0.171*** |
| Others | (0.038) | (0.036) | (0.042) | (0.041) |
| R-square | 0.03 | 0.10 | 0.06 | 0.10 |

Sources: Prud'hommes data from French Ministry of Justice, others from Insee
Additional controls: Year indicators. BC is a business cycle indicator computed
as follows: we regress the local unemployment rates on the national aggregate
including year and Prud'hommes fixed effects. Using this regression, we
compute the predicted values of the local unemployment rate by the national
aggregate. BC is the deviation in % of the average predicted values from the
predicted values."Judges" is the number of judges at the Prud'hommes level
divided by local employment in 1991.
Observations: 2,640; Number of Prudhommes: 264
Robust standard errors, clustered at the Prud'hommes, between parentheses.
*** p<0.01, ** p<0.05, * p<0.1

Table 11: Case outcomes, judge and lawyer density

| Dependent variable: | Winning | Losing | Null and Void | Crossing out | Conciliation | Agreement | Tied |
|---|---|---|---|---|---|---|---|
| BC | 0.0460 | -0.00523 | 0.0248 | 0.0363 | 0.0298 | -0.132** | -0.0234 |
| | (0.088) | (0.061) | (0.043) | (0.079) | (0.054) | (0.055) | (0.060) |
| BC(-1) | -0.0237 | -0.00325 | -0.0342 | -0.0794 | 0.0109 | 0.130 | 0.00754 |
| | (0.12) | (0.075) | (0.047) | (0.12) | (0.076) | (0.079) | (0.065) |
| Judges | 16.85*** | -2.730 | -3.486 | -12.72** | -2.356 | 4.438 | -1.090 |
| | (5.48) | (3.82) | (2.13) | (6.02) | (3.52) | (4.17) | (3.04) |
| Staff | 1.897 | -1.308 | 1.116 | 0.478 | -0.937 | -1.244 | 2.444** |
| | (2.06) | (1.20) | (0.87) | (1.78) | (1.43) | (1.10) | (1.01) |
| Lawyers | 0.0925 | -0.354** | -0.0642 | 0.655** | -0.0971 | -0.232 | -0.180 |
| | (0.27) | (0.18) | (0.069) | (0.32) | (0.16) | (0.18) | (0.13) |
| %union share | | | | | | | |
| FO | -0.0467 | 0.0536* | -0.00627 | -0.0598 | 0.0495 | 0.00969 | -0.153*** |
| | (0.059) | (0.031) | (0.020) | (0.058) | (0.039) | (0.027) | (0.028) |
| CFDT | -0.101** | -0.0662*** | -0.0183 | -0.0534 | 0.165*** | 0.0744*** | -0.0978*** |
| | (0.043) | (0.022) | (0.015) | (0.046) | (0.028) | (0.026) | (0.028) |
| Others | -0.0600 | -0.0923*** | 0.00600 | 0.129*** | 0.0397 | -0.0227 | -0.0686** |
| | (0.042) | (0.026) | (0.021) | (0.047) | (0.031) | (0.023) | (0.027) |
| R-square | 0.08 | 0.06 | 0.03 | 0.06 | 0.08 | 0.08 | 0.06 |

Sources: Prud'hommes data from French Ministry of Justice, others from Insee

Additional controls: Year indicators. BC is a business cycle indicator computed as follows: we regress the local unemployment rates on the national aggregate including year and Prud'hommes fixed effects. Using this regression, we compute the predicted values of the local unemployment rate by the national aggregate. BC is the deviation in % of the average predicted values from the predicted values."Judges" is the number of judges at the Prud'hommes level divided by local employment in 1991.

Observations: 1,820; Number of Prudhommes: 264

Robust standard errors, clustered at the Prud'hommes, between parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table 12: Case outcomes, judge and lawyer density ; grouped outcomes

| Dependent variable: | Win | Agreed | Dropped | Trial |
|---|---|---|---|---|
| BC | 0.0474 | -0.102 | 0.0611 | 0.0408 |
| | (0.088) | (0.075) | (0.083) | (0.096) |
| BC(-1) | -0.0412 | 0.140 | -0.114 | -0.0269 |
| | (0.11) | (0.11) | (0.12) | (0.13) |
| Judges | 9.569* | 2.081 | -16.20*** | 14.12** |
| | (5.43) | (5.03) | (6.05) | (5.88) |
| Staff | 2.240 | -2.182 | 1.593 | 0.589 |
| | (1.83) | (1.62) | (1.76) | (2.05) |
| Lawyer | 0.456 | -0.329 | 0.590* | -0.261 |
| | (0.29) | (0.26) | (0.32) | (0.26) |
| %union share | | | | |
| FO | -0.0794* | 0.0592 | -0.0661 | 0.00690 |
| | (0.047) | (0.044) | (0.059) | (0.058) |
| CFDT | 0.0381 | 0.239*** | -0.0717 | -0.168*** |
| | (0.034) | (0.039) | (0.045) | (0.047) |
| Others | 0.0973** | 0.0170 | 0.135*** | -0.152*** |
| | (0.039) | (0.037) | (0.044) | (0.044) |
| R-square | 0.04 | 0.12 | 0.07 | 0.11 |

Sources: Prud'hommes data from French Ministry of Justice, others from Insee
Additional controls: Year indicators. BC is a business cycle indicator computed as follows: we regress the local unemployment rates on the national aggregate including year and Prud'hommes fixed effects. Using this regression, we compute the predicted values of the local unemployment rate by the national aggregate. BC is the deviation in % of the average predicted values from the predicted values. "Judges" is the number of judges at the Prud'hommes level divided by local employment in 1991.
Observations: 1,820; Number of Prudhommes: 264
Robust standard errors, clustered at the Prud'hommes, between parentheses.
*** p<0.01, ** p<0.05, * p<0.1

Table 13: Labor flows and judges: pooled regressions

| Dependent variable: | Job Destructions | | | Job Creations | | | Job Net Creations | | |
|---|---|---|---|---|---|---|---|---|---|
| Specification | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| BC | -0.0322 | -0.0347 | -0.0331 | -0.0762** | -0.0786** | -0.0747** | -0.0440 | -0.0439 | -0.0416 |
|  | (0.031) | (0.031) | (0.031) | (0.032) | (0.032) | (0.032) | (0.035) | (0.035) | (0.034) |
| BC(-1) | -0.0419 | -0.0588* | -0.0586* | 0.0744** | 0.0584* | 0.0590* | 0.116*** | 0.117*** | 0.118*** |
|  | (0.036) | (0.032) | (0.032) | (0.032) | (0.030) | (0.030) | (0.037) | (0.037) | (0.037) |
| Judges | -7.055*** | -2.921 | -3.000* | -4.398** | -0.483 | -0.669 | 2.657 | 2.438 | 2.331 |
|  | (2.25) | (1.78) | (1.74) | (1.89) | (1.85) | (1.79) | (1.72) | (1.79) | (1.78) |
| Labor market size |  | 1.447*** | 1.447*** |  | 1.370*** | 1.372*** |  | -0.0766 | -0.0755 |
|  |  | (0.46) | (0.46) |  | (0.44) | (0.44) |  | (0.074) | (0.074) |
| Judges*BC |  |  | -3.117 |  |  | -7.345 |  |  | -4.227 |
|  |  |  | (9.42) |  |  | (10.9) |  |  | (12.1) |
| R-squared | 0.17 | 0.21 | 0.21 | 0.24 | 0.28 | 0.28 | 0.28 | 0.28 | 0.28 |

Sources: Prud'hommes data from Ministry of Labor. Labor flows from Sirene files on establishments.

Additional controls: Year indicators. BC is a business cycle indicator computed as follows: we regress the local unemployment rates on the national aggregate including year and Prud'hommes fixed effects. Using this regression, we compute the predicted values of the local unemployment rate by the national aggregate. BC is the deviation in % of the average predicted values from the predicted values. "Judges" is the number of judges at the Prud'hommes level divided by local employment in 1991.

Observations: 2,640; Number of Prud'hommes: 264

Robust standard errors, clustered at the Prud'hommes, between parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table 14: Labor flows and judges: pooled regressions with industry composition controls

| Dependent variable: | Job Destructions | | | Job Creations | | | Job Net Creations | | |
|---|---|---|---|---|---|---|---|---|---|
| Specification | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| BC | -0.0267 | -0.0284 | -0.0264 | -0.0703** | -0.0716** | -0.0675** | -0.0436 | -0.0432 | -0.0412 |
| | (0.031) | (0.031) | (0.031) | (0.032) | (0.032) | (0.032) | (0.035) | (0.035) | (0.035) |
| BC(-1) | -0.0371 | -0.0439 | -0.0435 | 0.0833*** | 0.0781*** | 0.0788*** | 0.120*** | 0.122*** | 0.122*** |
| | (0.032) | (0.032) | (0.032) | (0.029) | (0.028) | (0.028) | (0.037) | (0.036) | (0.036) |
| Judges | -1.279 | -0.592 | -0.686 | -2.916** | -2.386* | -2.573* | -1.637 | -1.795 | -1.887* |
| | (1.29) | (1.44) | (1.44) | (1.22) | (1.40) | (1.37) | (1.10) | (1.12) | (1.07) |
| Labor market size | | 0.519 | 0.519 | | 0.400 | 0.400 | | -0.119 | -0.119 |
| | | (0.43) | (0.44) | | (0.44) | (0.45) | | (0.099) | (0.099) |
| Judges*BC | | | -3.767 | | | -7.482 | | | -3.715 |
| | | | (8.91) | | | (11.2) | | | (12.8) |
| R-squared | 0.25 | 0.25 | 0.25 | 0.41 | 0.41 | 0.41 | 0.34 | 0.34 | 0.34 |

Sources: Prud'hommes data from Ministry of Labor. Labor flows from Sirene files on establishments.

Additional controls: share of employment by firm size and industry in 1993, year indicators. BC is a business cycle indicator computed as follows: we regress the local unemployment rates on the national aggregate including year and Prud'hommes fixed effects. Using this regression, we compute the predicted values of the local unemployment rate by the national aggregate. BC is the deviation in % of the average predicted values from the predicted values. "Judges" is the number of judges at the Prudhommes level divided by local employment in 1991.

Observations: 2,640; Number of Prud'hommes: 264

Robust standard errors, clustered at the Prud'hommes, between parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table 15: Labor Flows and Judges: Pooled regressions with Industry Composition Controls by Labor Market size

| Dependent variable: | Job Destructions | | Job Creations | | Job Net Creations | |
|---|---|---|---|---|---|---|
| Labor Market Size | Small | Large | Small | Large | Small | Large |
| BC | -0.106*** | 0.0333 | -0.0930* | -0.0617 | 0.0125 | -0.0949** |
| | (0.040) | (0.049) | (0.050) | (0.040) | (0.053) | (0.045) |
| BC(-1) | 0.0330 | -0.0477 | 0.0958** | 0.104** | 0.0629 | 0.151*** |
| | (0.041) | (0.050) | (0.039) | (0.041) | (0.050) | (0.055) |
| Judges | -0.956 | -22.51** | -1.320 | -30.66*** | -0.365 | -8.145 |
| | (1.83) | (9.37) | (1.83) | (8.30) | (2.00) | (6.65) |
| Labor market size | -7.233 | 0.200 | -5.633 | -0.0525 | 1.600 | -0.252** |
| | (4.84) | (0.39) | (4.62) | (0.35) | (4.57) | (0.13) |
| R-squared | 0.23 | 0.25 | 0.35 | 0.47 | 0.37 | 0.32 |

Sources: Prud'hommes data from Ministry of Labor. Labor flows from Sirene files on establishments.

We rank the Prud'hommes according to the share in total employment of the area of their juridiction. "Small" stands for the 132 smallest Prud'hommes. They account for 16% of total employment in 1991.

Additional controls: share of employment by firm size and industry in 1993, year indicators. BC is a business cycle indicator computed as follows: we regress the local unemployment rates on the national aggregate including year and Prud'hommes fixed effects. Using this regression, we compute the predicted values of the local unemployment rate by the national aggregate. BC is the deviation in % of the average predicted values from the predicted values. "Judges" is the number of judges at the Prud'hommes level divided by local employment in 1991. Observations: 2,640; Number of Prud'hommes: 132 in each labor market size class

Robust standard errors, clustered at the Prud'hommes, between parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table 16: Case outcomes and firm size

| Variable: | Small Firms | | Large Firms | |
|---|---|---|---|---|
| | Mean | Std | Mean | Std |
| Winning | 0,48 | 0,002 | 0,47 | 0,003 |
| Losing | 0,13 | 0,001 | 0,18 | 0,002 |
| Null and Void | 0,06 | 0,001 | 0,05 | 0,001 |
| Crossed Out | 0,12 | 0,002 | 0,12 | 0,002 |
| Conciliation | 0,12 | 0,001 | 0,09 | 0,001 |
| Agreement | 0,09 | 0,001 | 0,09 | 0,002 |
| Tied | 0,05 | 0,001 | 0,10 | 0,002 |
| Dropped | 0,18 | 0,002 | 0,17 | 0,002 |
| Agreed | 0,21 | 0,002 | 0,18 | 0,002 |
| Trial | 0,61 | 0,002 | 0,65 | 0,003 |
| Victory | 0,79 | 0,002 | 0,72 | 0,003 |

Sources: Prud'hommes data from Ministry of Justice. See Table 1 for the definitions of the variables. Mean and Std are across Prud'hommes and Years. Observations : 3654

Table 17: Labor flows and judges: pooled regressions by establishment size

| Dependent variable: | Job Destructions | | | Job Creations | | | Job Net Creations | | |
|---|---|---|---|---|---|---|---|---|---|
| Labor market size | All | Small | Large | All | Small | Large | All | Small | Large |
| BC | -0.0395 | -0.0991*** | 0.0161 | -0.0740*** | -0.0806* | -0.0808*** | -0.0345 | 0.0186 | -0.0969** |
| | (0.025) | (0.033) | (0.038) | (0.026) | (0.042) | (0.031) | (0.030) | (0.045) | (0.039) |
| BC(-1) | -0.0385 | 0.0185 | -0.0441 | 0.0715*** | 0.0754** | 0.116*** | 0.110*** | 0.0569 | 0.160*** |
| | (0.025) | (0.032) | (0.040) | (0.024) | (0.033) | (0.037) | (0.030) | (0.042) | (0.047) |
| Large Est. | -0.0199*** | -0.0211*** | -0.0113** | -0.101*** | -0.103*** | -0.0912*** | -0.0809*** | -0.0820*** | -0.0799*** |
| | (0.0020) | (0.0037) | (0.0051) | (0.0019) | (0.0031) | (0.0056) | (0.0019) | (0.0039) | (0.0049) |
| Judges*Small Est. | -2.422** | -3.109* | -12.34 | -3.036* | -2.712 | -21.25** | -0.614 | 0.396 | -8.913 |
| | (1.21) | (1.85) | (8.71) | (1.71) | (2.42) | (8.38) | (1.25) | (2.00) | (7.37) |
| Judges*Large Est. | 0.216 | 0.240 | -23.39** | -2.249 | -0.700 | -35.06*** | -2.464 | -0.941 | -11.68 |
| | (1.79) | (1.96) | (11.5) | (1.71) | (2.46) | (10.6) | (1.73) | (3.05) | (7.61) |
| R-squared | 0.25 | 0.19 | 0.27 | 0.69 | 0.66 | 0.72 | 0.52 | 0.50 | 0.54 |

Sources: Prud'hommes data from Ministry of Labor. Labor flows from Sirene files on establishments.

Additional controls: share of employment by firm size and industry in 1991, year indicators. We distinguish in these regressions the labor flows in large firms and small firms at the Prud'homme level. BC is a business cycle indicator computed as follows: we regress the local unemployment rates on the national aggregate including year and Prudhommes dummies. Using this regression, we compute the predicted values of the local unemployment rate by the national aggregate. BC is the deviation in % of the average predicted values from the predicted values. "Judges" is the number of judges at the local Prud'hommes over the local employment in 1991. "Large Est." is a dummy equalling one when the establishment has more than 10 employees. "Small Est." is a dummy equalling one when the establishment has less than 10 employees.
Observations: 5,280; Number of Prud'hommes: 264 when all labor markets are considered. Otherwise : Observations: 2,640; Number of Prudhommes: 264
Robust standard errors, clustered at the Prud'hommes, between parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table 18: Labor flows and judges: pooled regressions by labor market size and industry

| Industry | Manufacturing | | | Trade | | | Service | | |
|---|---|---|---|---|---|---|---|---|---|
| Dependent variables | Creations | Destructions | Net Creations | Creations | Destructions | Net Creations | Creations | Destructions | Net Creations |
| BC | 0.00770*** | 0.0133*** | 0.00561* | 0.00471*** | 0.0126*** | 0.00793*** | 0.000799 | -0.00529 | -0.00609 |
| | (0.0029) | (0.0020) | (0.0031) | (0.0017) | (0.0020) | (0.0022) | (0.0073) | (0.0039) | (0.0088) |
| BC(-1) | 0.00154 | 0.00211 | 0.000568 | 0.000368 | -0.00380* | -0.00416* | -0.00665 | -0.00279 | 0.00385 |
| | (0.0024) | (0.0024) | (0.0032) | (0.0019) | (0.0021) | (0.0022) | (0.0079) | (0.0046) | (0.0097) |
| Judges | 1.542 | 0.419 | -1.123 | -2.658 | -6.809*** | -4.151** | -2.655* | -3.084** | -0.429 |
| | (1.49) | (0.97) | (1.16) | (2.94) | (2.47) | (1.69) | (1.55) | (1.39) | (1.28) |
| R-squared | 0.19 | 0.24 | 0.23 | 0.17 | 0.31 | 0.26 | 0.12 | 0.18 | 0.17 |

Sources: Prud'hommes data from Ministry of Labor. Labor flows from Sirene files on establishments.

Additional controls: share of employment by firm size and industry in 1991, labor market size, year indicators. BC is the lagged share of local industry employment in the national average compounded by the current net industry job creation at the national level. "Judges" is the number of judges belonging to the industry section at the Prud'hommes level divided by total employment in the corresponding industry in 1991. Observations: 2,640; Number of Prud'hommes: 264

Robust standard errors, clustered at the Prud'hommes, between parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

## Table 19: Case outcomes and industry

| Variable: | Manufacturing | | Trade | | Service | |
|---|---|---|---|---|---|---|
| | Mean | Std | Mean | Std | Mean | Std |
| Winning | 0,46 | 0,002 | 0,45 | 0,002 | 0,44 | 0,002 |
| Losing | 0,15 | 0,001 | 0,14 | 0,001 | 0,14 | 0,002 |
| Null and Void | 0,06 | 0,001 | 0,06 | 0,001 | 0,07 | 0,001 |
| Crossed Out | 0,13 | 0,002 | 0,13 | 0,002 | 0,14 | 0,002 |
| Conciliation | 0,11 | 0,001 | 0,12 | 0,001 | 0,11 | 0,002 |
| Agreement | 0,09 | 0,001 | 0,09 | 0,001 | 0,11 | 0,002 |
| Tied | 0,07 | 0,001 | 0,06 | 0,001 | 0,05 | 0,001 |
| Dropped | 0,19 | 0,002 | 0,19 | 0,002 | 0,20 | 0,002 |
| Agreed | 0,20 | 0,002 | 0,22 | 0,002 | 0,22 | 0,002 |
| Trial | 0,61 | 0,002 | 0,59 | 0,002 | 0,58 | 0,002 |
| Victory | 0,76 | 0,002 | 0,76 | 0,002 | 0,76 | 0,003 |

Sources: Prud'hommes data from Ministry of Justice. See Table 1 for the definitions of the variables. Mean and Std are across Prud'hommes and Years. Observations : 3654

Table 20: Difference in labor flows 1992-2002 and Prud'hommes

| Dependent variable: | Job Destructions | | | Job Creations | | | Job Net Creations | | |
|---|---|---|---|---|---|---|---|---|---|
| Labor market size | All | Small | Large | All | Small | Large | All | Small | Large |
| BC(2002)-BC(1992) | 0.0255 | -0.0109 | 0.238 | 0.325*** | 0.318** | 0.410*** | 0.300** | 0.328 | 0.172 |
| | (0.13) | (0.20) | (0.17) | (0.095) | (0.15) | (0.13) | (0.15) | (0.23) | (0.18) |
| Judges | 6.274 | -5.127 | -58.87** | -4.129 | -9.649 | -30.63* | -10.40** | -4.523 | 28.25 |
| | (5.31) | (8.89) | (25.0) | (4.19) | (7.57) | (18.4) | (5.28) | (9.22) | (26.3) |
| R-squared | 0.20 | 0.20 | 0.22 | 0.09 | 0.09 | 0.15 | 0.21 | 0.22 | 0.21 |

Sources: Prud'hommes data from Ministry of Labor. Labor flows from Sirene files on establishments.

Additional controls: share of employment by firm size and industry in 1991, labor market size. BC is a business cycle indicator computed as follows: we regress the local unemployment rates on the national aggregate including year and Prud'hommes fixed effects. Using this regression, we compute the predicted values of the local unemployment rate by the national aggregate. BC is the deviation in % of the average predicted values from the predicted values. "Judges" is the number of judges at the local Prud'hommes over the local employment in 1991. Observations: 264 Prud'hommes when all labor markets are considered. Otherwise : Observations: 162 Prud'hommes.

Robust standard errors, clustered at the Prud'hommes, between parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table 21: Labor flows and judge density; regressions with fixed effects

| Dependent variable: | Job Destructions | | | Job Creations | | | Job Net Creations | | |
|---|---|---|---|---|---|---|---|---|---|
| Labor market size | All | Small | Large | All | Small | Large | All | Small | Large |
| BC | -0.0244 | -0.0911** | 0.0268 | -0.0671** | -0.0766 | -0.0722* | -0.0427 | 0.0145 | -0.0990** |
| | (0.030) | (0.041) | (0.046) | (0.034) | (0.050) | (0.041) | (0.036) | (0.053) | (0.044) |
| BC(-1) | -0.00849 | 0.0790* | -0.0433 | 0.0998*** | 0.0955** | 0.127*** | 0.108*** | 0.0165 | 0.170*** |
| | (0.033) | (0.045) | (0.048) | (0.030) | (0.043) | (0.043) | (0.038) | (0.051) | (0.056) |
| Judges | -10.52 | -4.716 | -22.20* | 2.158 | -1.937 | 8.229 | 12.68 | 2.780 | 30.43*** |
| | (10.2) | (15.4) | (11.3) | (9.31) | (15.0) | (10.2) | (12.1) | (19.0) | (9.23) |
| R-squared | 0.42 | 0.42 | 0.42 | 0.54 | 0.48 | 0.57 | 0.50 | 0.50 | 0.51 |

Sources: Prud'hommes data from Ministry of Labor. Job flows from Sirene files on establishments.

Additional controls: Prud'hommes and Year indicators. BC is a business cycle indicator computed as follows: we regress the local unemployment rates on the national aggregate including year and Prud'hommes fixed effects. Using this regression, we compute the predicted values of the local unemployment rate by the national aggregate. BC is the deviation in % of the average predicted values from the predicted values. "Judges" is the number of judges at the local Prud'hommes over the local employment in 1991. Observations: 5,280; Number of Prud'hommes: 264.

Robust standard errors, clustered at the Prud'hommes, between parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table 22: Instrumental regressions: Filing rate

| Dependent variable: | Job destructions | Job creations | Net Job creations |
|---|---|---|---|
| BC | -0.0626 | -0.0737 | -0.0111 |
| | (0.092) | (0.068) | (0.097) |
| BC(-1) | -0.173*** | 0.0120 | 0.185** |
| | (0.062) | (0.060) | (0.075) |
| Filing rate | -0.464*** | -0.205* | 0.259* |
| | (0.16) | (0.11) | (0.16) |
| Hansen J Statistic | 0.37 | 0.93 | 0.38 |
| R-squared | 0.09 | 0.40 | 0.52 |

First stage regression:

| Dependent variable: | Filing rate |
|---|---|
| BC | -0.305*** |
| | (0.11) |
| BC(-1) | -0.0827 |
| | (0.086) |
| Lawyer | 5.162*** |
| | (1.07) |
| Duration(-2) | -0.0260 |
| | (0.017) |
| R-squared | 0.47 |
| F statistic | 12.52 |

Sources: Prud'hommes data from Ministry of Labor. Job flows from Sirene files on establishments.
"Filing rate" is the number of cases filed for unfair dismissals at the Prud'homme over the local stock of unemployed, "Duration" is the log of the average duration of the cases disposed the year before at the Prud'homme, "Lawyers" is the number of lawyers practicing in the local area over the 1995 local total employment
Additional controls: Prud'hommes and Year indicators. BC is a business cycle indicator computed as follows: we regress the local unemployment rates on the national aggregate including year and Prud'hommes fixed effects. Using this regression, we compute the predicted values of the local unemployment rate by the national aggregate. BC is the deviation in % of the average predicted values from the predicted values. Observations: 2,640; Number of Prud'hommes: 264
Robust standard errors, clustered at the Prud'hommes, between parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table 23: Legal representation and job flows: OLS estimates

| Dependent variable: | Job Destructions | Job Creations | Job Net Creations |
|---|---|---|---|
| BC | 0.00604 | -0.0253 | -0.0314 |
|  | (0.040) | (0.029) | (0.041) |
| BC(-1) | 0.109 | 0.0350 | -0.0742 |
|  | (0.12) | (0.028) | (0.12) |
| Lawyer (Firm) | -0.0388** | 0.0128 | 0.0516** |
|  | (0.017) | (0.0087) | (0.021) |
| Lawyer (Worker) | -0.0381** | -0.0159 | 0.0222 |
|  | (0.019) | (0.011) | (0.021) |
| R-square | 0.38 | 0.49 | 0.55 |

Table 24: Legal representation and case outcomes: OLS estimates

| Dependent variable: | Win | Trial | Drop | Conci |
|---|---|---|---|---|
| BC | -0.0484 | 0.0336 | -0.0970 | 0.0634 |
|  | (0.038) | (0.045) | (0.069) | (0.059) |
| BC(-1) | -0.118 | 0.0979 | -0.0521 | -0.0458 |
|  | (0.084) | (0.074) | (0.037) | (0.063) |
| Lawyer (Firm) | -0.0796*** | 0.0386 | -0.0354 | -0.00325 |
|  | (0.025) | (0.031) | (0.023) | (0.029) |
| Lawyer (Worker) | 0.0864** | 0.214*** | -0.133** | -0.0818** |
|  | (0.042) | (0.057) | (0.063) | (0.041) |
| R-square | 0.07 | 0.30 | 0.10 | 0.32 |

Sources: Prud'hommes data from Ministry of Labor. Job flows from Sirene files on establishments.

"Win", "Trial", "Drop" and "Conci" are respectively the number of workers victory, trials, dropped cases and conciliated cases over the total number of cases. "Lawyer (Worker)") is the percentage of firms (workers) represented by a lawyer (the total number of cases is the population). Observations: 2,112 (1996-2003); Number of Prudhommes: 264

Additional controls: Prud'hommes and Year indicators. BC is a business cycle indicator computed as follows: we regress the local unemployment rates on the national aggregate including year and Prud'hommes fixed effects. Using this regression, we compute the predicted values of the local unemployment rate by the national aggregate. BC is the deviation in % of the average predicted values from the predicted values. Observations: 2,640; Number of Prud'hommes: 264

Robust standard errors, clustered at the Prud'hommes, between parentheses. *** p<0.01, ** p<0.05, * p<0.1

## Table 25: Instrumental regressions: legal representation

| Dependent variable: | Job Destructions | Job Creations | Job Net Creations |
|---|---|---|---|
| BC | -0.0805 | -0.0306 | 0.0499 |
| | (0.10) | (0.041) | (0.097) |
| BC(-1) | 0.104 | 0.0320 | -0.0724 |
| | (0.12) | (0.029) | (0.12) |
| Lawyer (Firm) | -0.375** | -0.0243 | 0.350** |
| | (0.18) | (0.042) | (0.17) |
| Lawyer (Worker) | -0.858*** | -0.149* | 0.709*** |
| | (0.28) | (0.081) | (0.27) |
| P-Value  Hansen J Statistic | .45 | .55 | .36 |

| Dependent variable: | Lawyer (Firm) | Lawyer (Worker) |
|---|---|---|
| BC | -0.451*** | 0.0848* |
| | (0.094) | (0.046) |
| BC(-1) | 0.0903 | -0.0345 |
| | (0.12) | (0.055) |
| Judges | 227.0 | 224.5*** |
| | (163) | (66.3) |
| Clerks | -16.22*** | 5.040* |
| | (4.80) | (2.69) |
| Lawyers | -0.202 | 3.041** |
| | (2.46) | (1.47) |
| F statistic | 4.47 | 7.26 |

Sources: Prudhommes data from Ministry of Interior. Creation, Destruction data from Sirene files on establishments.

Additional controls: Prud'hommes and Year Indicators year indicators. BC is a business cycle indicator computed as follows: we regress the local unemployment rates on the national aggregate including year and Prudhommes dummies. Using this regression, we compute the predicted values of the local unemployment rate by the national aggregate. BC is the deviation in % of the average predicted values from the predicted values."Judges", "Lawyers" and "Clercks" are respectively the number of judges and lawyers and clercs at the local level (Prudhommes for the judge, Tribunal d'Instance for Lawyers and Clerks) divided by total employment in 1995. "Lawyer (Firm)" (resp. "Lawyer (Worker)") is the fraction of firms (workers) represented by a lawyer (terminated cases are the population). Observations: 2,112 (1996-2003); Number of Prudhommes: 264.

Robust standard errors, clustered at the prudhommes, between parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$. Weight is the 1995 employment share.

Table 26: Predicted number of cases and labor flows

| Dependant Variable: | Job destruction | | | Job creaction | | | Net job creation | | |
|---|---|---|---|---|---|---|---|---|---|
| BC | 0.0111 | 0.0168 | 0.0196 | 0.0696** | 0.0699** | 0.0702** | 0.0545 | 0.0530 | 0.0506 |
| | (0.034) | (0.034) | (0.034) | (0.030) | (0.030) | (0.030) | (0.042) | (0.042) | (0.042) |
| BC(-1) | 0.00795 | 0.0147 | 0.0438 | -0.101*** | -0.101*** | -0.0976*** | -0.115*** | -0.116*** | -0.141*** |
| | (0.034) | (0.033) | (0.034) | (0.029) | (0.029) | (0.029) | (0.041) | (0.041) | (0.041) |
| Judges (-1) | -0.129** | -0.0985* | -0.0803 | 0.0346 | 0.0389 | 0.0411 | 0.162*** | 0.137** | 0.121** |
| | (0.051) | (0.054) | (0.054) | (0.035) | (0.038) | (0.039) | (0.053) | (0.058) | (0.058) |
| Judges(-1)*Labor market size(-1) | | -24.60** | -31.76** | | -3.651 | -4.547 | | 20.94 | 27.21 |
| | | (11.9) | (13.0) | | (12.0) | (12.0) | | (18.0) | (19.5) |
| Judges(-1)*BC(-1) | | | -0.531*** | | | -0.0665 | | | 0.465*** |
| | | | (0.14) | | | (0.12) | | | (0.17) |
| R-squared | 0.33 | 0.34 | 0.34 | 0.38 | 0.38 | 0.38 | 0.47 | 0.47 | 0.47 |

Sources: Prud'hommes data from Ministry of Labor. Job flows from Sirene files on establishments.

"Judges" is the number of judges at the local Prud'homme over the predicted local number of cases (see core text for computation details)

Additional controls: Prud'hommes and Year indicators. BC is a business cycle indicator computed as follows: we regress the local unemployment rates on the national aggregate including year and Prud'hommes fixed effects. Using this regression, we compute the predicted values of the local unemployment rate by the national aggregate. BC is the deviation in % of the average predicted values from the predicted values.

Observations: 2,640; Number of Prud'hommes: 264

Robust standard errors, clustered at the Prud'hommes, between parentheses. *** p<0.01, ** p<0.05, * p<0.1

### Table 27: Judge density and employment rates: small labor markets

| Dependent variable: | Judge parameter | Std | R-square | Dependent variable: | Judge parameter | Std | R-square |
|---|---|---|---|---|---|---|---|
| Employment rate | 59.15*** | (12.9) | 0.45 | Relative Employment rates: | | | |
| Employment rate by sex | | | | Female/Male | 50.69*** | (16.4) | 0.23 |
| Male | 48.05*** | (10.9) | 0.31 | 15-34 yrs/35-49 yrs | 24.27 | (17.1) | 0.10 |
| Female | 69.38*** | (16.2) | 0.40 | 50 yrs+/35-49 yrs | 26.28* | (14.7) | 0.20 |
| Employment rate by age group: | | | | <High School/Some College | 59.54** | (22.8) | 0.14 |
| 15-34 yrs | 51.09*** | (11.8) | 0.24 | | | | |
| 35-49 yrs | 52.54*** | (17.4) | 0.43 | Unemployment and temporary job rates | | | |
| 50 yrs + | 55.52*** | (19.8) | 0.26 | Unemployment rate | -33.73*** | (8.33) | 0.39 |
| Male Employment rate by age group: | | | | Youth Unemployment rate | -31.74*** | (4.75) | 0.24 |
| 15-34 yrs | 40.24*** | (10.9) | 0.20 | % Short Term Unemployment (l< 1 year) | 49.93** | (22.9) | 0.18 |
| 35-49 yrs | 35.51*** | (12.4) | 0.27 | Temporary jobs | 20.81 | (20.1) | 0.29 |
| 50 yrs + | 43.66* | (24.8) | 0.14 | Constrained Part-time | -16.01 | (19.7) | 0.12 |
| Female Employment rate by age group: | | | | Part-time | 5.216 | (9.98) | 0.30 |
| 15-34 yrs | 65.28*** | (14.0) | 0.20 | | | | |
| 35-49 yrs | 62.87** | (24.7) | 0.37 | | | | |
| 50 yrs + | 67.40*** | (18.7) | 0.26 | | | | |
| Employment rate by education: | | | | | | | |
| <High School | 64.32*** | (14.3) | 0.42 | | | | |
| Some College | 32.87*** | (8.22) | 0.22 | | | | |

Sources: Prud'hommes data from Ministry of Labor. Employment rates from the French LFS.

Additional controls: Share of employment by firm size and industry in 1991, labor market size, year indicators, BC indicator. BC is a business cycle indicator computed as follows: we regress the local unemployment rates on the national aggregate including year and Prud'hommes fixed effects. Using this regression, we compute the predicted values of the local unemployment rate by the national aggregate. BC is the deviation in % of the average predicted values from the predicted values. "Judges" is the number of judges at the département level divided by département employment in 1991. Observations: 428; Number of Départements: 48

Robust standard errors, clustered at the Prud'hommes, between parentheses. *** p<0.01, ** p<0.05, * p<0.1

## Table 28: Judge density and employment rates: large labor markets

| Dependent variable: | Judge parameter | Std | R-square | Dependent variable: | Judge parameter | Std | R-square |
|---|---|---|---|---|---|---|---|
| Employment rate | -79.79*** | (21.6) | 0.43 | Relative Employment rates: | | | |
| Employment rate by sex | | | | Female/Male | -94.78*** | (24.5) | 0.43 |
| Male | -53.29** | (22.3) | 0.32 | 15-34 yrs/35-49 yrs | -20.42 | (31.9) | 0.21 |
| Female | -103.2*** | (23.5) | 0.47 | 50 yrs+/35-49 yrs | -33.81 | (23.7) | 0.60 |
| Employment rate by age group: | | | | <High School/Some College | -73.89* | (42.2) | 0.26 |
| 15-34 yrs | -68.25** | (28.0) | 0.27 | | | | |
| 35-49 yrs | -84.04*** | (22.7) | 0.38 | Unemployment and temporary job rates | | | |
| 50 yrs + | -74.83*** | (22.8) | 0.61 | Unemployment rate | 46.33** | (17.4) | 0.36 |
| Male Employment rate by age group: | | | | Youth Unemployment rate | 32.99*** | (11.5) | 0.31 |
| 15-34 yrs | -46.87 | (31.6) | 0.23 | % Short Term Unemployment (l< 1 year) | -11.85 | (29.3) | 0.26 |
| 35-49 yrs | -45.69** | (18.0) | 0.34 | Temporary jobs | 8.395 | (6.34) | 0.27 |
| 50 yrs + | -52.70** | (24.5) | 0.51 | Constrained Part-time | 64.53* | (33.8) | 0.21 |
| Female Employment rate by age group: | | | | Part-time | 13.31 | (16.4) | 0.49 |
| 15-34 yrs | -88.55*** | (26.1) | 0.31 | | | | |
| 35-49 yrs | -117.8*** | (29.1) | 0.36 | | | | |
| 50 yrs + | -90.76*** | (27.5) | 0.61 | | | | |
| Employment rate by education: | | | | | | | |
| <High School | -86.31*** | (20.3) | 0.40 | | | | |
| Some College | -40.85 | (38.0) | 0.30 | | | | |

Sources: Prud'hommes data from Ministry of Labor. Employment rates from the French LFS.

Additional controls: Share of employment by firm size and industry in 1991, labor market size, year indicators, BC indicator. BC is a business cycle indicator computed as follows: we regress the local unemployment rates on the national aggregate including year and Prud'hommes fixed effects. Using this regression, we compute the predicted values of the local unemployment rate by the national aggregate. BC is the deviation in % of the average predicted values from the predicted values. "Judges" is the number of judges at the département level divided by département employment in 1991.

Observations: 423; Number of Départements: 47

Robust standard errors, clustered at the Prud'hommes, between parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 29: Judge density and employment rates: département fixed effects

| Dependent variable: | Judge parameter | Std | R-square | Dependent variable: | Judge parameter | Std | R-square |
|---|---|---|---|---|---|---|---|
| Employment rate | -71.70*** | (19.8) | 0.89 | Relative Employment rates: | | | |
| Employment rate by sex | | | | Female/Male | 1.022 | (49.9) | 0.78 |
| Male | -85.61*** | (21.0) | 0.80 | 15-34 yrs/35-49 yrs | -42.06 | (49.5) | 0.61 |
| Female | -61.26** | (30.0) | 0.89 | 50 yrs+/35-49 yrs | 10.97 | (68.6) | 0.80 |
| Employment rate by age group: | | | | <High School/Some College | -125.2** | (51.9) | 0.61 |
| 15-34 yrs | -84.28** | (37.6) | 0.77 | | | | |
| 35-49 yrs | -81.80*** | (21.4) | 0.82 | Unemployment and temporary job rates | | | |
| 50 yrs + | -37.39 | (50.3) | 0.85 | Unemployment rate | 52.28*** | (14.8) | 0.85 |
| Male Employment rate by age group: | | | | Youth Unemployment rate | 15.19 | (15.9) | 0.65 |
| 15-34 yrs | -95.83** | (44.1) | 0.66 | % Short Term Unemployment (l< 1 year) | -178.7** | (76.0) | 0.55 |
| 35-49 yrs | -72.38*** | (23.0) | 0.70 | Temporary jobs | 29.53*** | (10.7) | 0.70 |
| 50 yrs + | -88.61 | (65.4) | 0.76 | Constrained Part-time | -86.87 | (75.9) | 0.63 |
| Female Employment rate by age group: | | | | Part-time | 27.91 | (19.4) | 0.81 |
| 15-34 yrs | -78.62* | (40.2) | 0.78 | | | | |
| 35-49 yrs | -93.68** | (37.1) | 0.80 | | | | |
| 50 yrs + | 13.03 | (50.4) | 0.84 | | | | |
| Employment rate by education: | | | | | | | |
| <High School | -97.88*** | (23.9) | 0.83 | | | | |
| Some College | -7.093 | (31.6) | 0.73 | | | | |

Sources: Prud'hommes data from Ministry of Labor. Employment rates from the French LFS.

Additional controls: Year indicators. BC is a business cycle indicator computed as follows: we regress the local unemployment rates on the national aggregate including year and Prudhommes dummies. Using this regression, we compute the predicted values of the local unemployment rate by the national aggregate. BC is the deviation in % of the average predicted values from the predicted values. "Judges" is the number of judges at the département level divided by département employment in 1991. Observations: 1140; Number of Départements: 95

Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1