

**AN ECONOMIC ANALYSIS OF COURT  
FEES: EVIDENCE FROM THE SPANISH  
CIVIL JURISDICTION**

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# **AN ECONOMIC ANALYSIS OF COURT FEES: EVIDENCE FROM THE SPANISH CIVIL JURISDICTION <sup>(\*)</sup>**

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## **Abstract**

The adoption of court fees has been traditionally justified as a means to improve the performance of enforcement institutions as they may have an effect of deterrence of the dispute. Judicial congestion has clear negative impacts on economic performance. Spain, which has one of the highest rates of litigation of the OECD, has traditionally lacked a general system of court fees. In 2002, the Congress passed a system of court fees to be paid by legal entities and enterprises. In 2012, the fees were extended to individuals and abrogated in 2015. This bounded period of enforcement allows us to empirically test the impacts of court fees on congestion. In order to do this, we collected a comprehensive database of quarterly data on the real workload of civil courts. This study concludes that the effects of court fees, although reduced courts' congestion, are far from homogeneous and depend on the type of procedure, the workload of the courts and the local macroeconomic conditions.

**Keywords:** Courts fees, judicial efficacy, litigation rates.

**JEL classification:** K41, E51, G2.

## **Resumen**

La aprobación de un sistema de tasas judiciales se ha justificado tradicionalmente como un medio para mejorar la eficacia judicial, en tanto que podría reducir el número de conflictos que se llevan ante la justicia. La congestión judicial, de hecho, está relacionada con un peor rendimiento de la economía. Si bien España tiene una de las tasas de litigación más altas de la OCDE, tradicionalmente ha carecido de un sistema amplio de tasas judiciales. En 2002, el Congreso aprobó un sistema de tasas pagaderas por las personas jurídicas. En 2012, las tasas se ampliaron a las personas físicas y, en 2015, fueron derogadas parcialmente. Este documento aprovecha estos períodos limitados de vigor para analizar empíricamente los impactos de las tasas en la congestión judicial. Para poder hacerlo, se ha recopilado una base de datos trimestral con información sobre la carga de trabajo real de la jurisdicción civil. El análisis permite concluir que los efectos de las tasas, a pesar de haber reducido la congestión judicial, están lejos de ser homogéneos y dependen del tipo de procedimiento, la carga de trabajo de los órganos judiciales y las condiciones macroeconómicas locales.

**Palabras clave:** tasas judiciales, eficacia judicial, tasas de litigación.

**Códigos JEL:** K41, E51, G2.

# 1 Introduction

Nowadays almost all European countries charge a fee for the use of the judicial system. According to the European Commission for the Efficiency of Justice (CEPEJ, 2016) in 2014 there were court fees, with different legal configurations and tax burdens, in all countries participating in the process of evaluation of the Commission (45) except for Luxembourg and France<sup>1</sup>. Moreover, fees have increased in many jurisdictions over time (Hodges et al., 2010). Governments usually justify the adoption of court fees as a means to reduce the "congestion" of the national judicial system, thus taking the fees as a policy of "deterrence" of the dispute, as an instrument of provision of funding for the administration of justice and a way to enhance the access to justice (by protecting low-income litigants) (Rickman and Tzavara, 2005).

In this context, the relevance of the good performance of enforcement institutions (such as the judicial system) for explaining differences in economic efficiency is out of question today. Following Coase (1960) carrying on market transactions involves both contracting and controlling that the terms of the contracts are being respected. If enforcing contracts becomes very difficult, agents may decide not to sign certain agreements. For instance, this risk seems critical in the case of investment decisions [Nunn (2007), Mora-Sanguinetti and Spruk (2018)]. North (1994) considered "enforcement" as part of the "institutions" i.e. constraints that structure human interactions. The main enforcement mechanism in any develop economy is the judicial system as all the rest of mechanisms<sup>2</sup> depend on it in ultimate terms. In summary, a well-functioning judicial system, is critical for economic performance. Several economic studies (see Palumbo et al. 2013a for a survey) have found effects ranging from the impacts on the credit markets [Jappelli et al. (2005) or Shvets (2013) among many others], firm size (Giacomelli and Menon, 2017) or specialization (Chemin, 2012).

However, the use of court fees as a tool for achieving higher economic efficiency is not clear. If we focus on the impact of court fees on litigation, the literature remarks that neither extreme is beneficial: low (or inexistent) court fees may lead to high levels of litigation, which may lead to a judicial collapse and a subsequent reduction in the effective exercise of the right of citizens to access the judicial system (Shavell, 1997, Esteller-Moré, 2002, Esposito et al, 2014 or Mery Nieto, 2015). From this point of view, court fees would be "internalizing" part of the social costs generated by the litigants (thus, reducing a negative externality of litigation). However, high court fees may prevent some "meritorious" cases to be presented at the courts and therefore prevent the publication of useful ju-

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<sup>1</sup>In France a court fee applies in the case of an appeal procedure.

<sup>2</sup>We could allude to several "enforcement" mechanisms available in an economy: on the private side, we could mention arbitration, "reputation", "prestige" (North, 1990) or even looking like a "gentleman" (Mokyr, 2010). On the public side, there are also several mechanisms (apart from the judicial system) like the notaries, the sanction functions of some regulators or public agencies, etc.



risprudence (which is needed to generate legal certainty). Thus, high court fees may reduce some positive externalities of litigation (Maher, 2010). Doménech (2017) illustrates this set of problems taking as an example the conflicts related to the protection of the environment in the contentious-administrative jurisdiction. He argues that it is possible to think that there is infralitigation in those cases. On the one hand, pollution may affect future generations that do not even litigate today. On the other, the private benefit for a litigant may be less than the cost of litigation. For all these reasons, it does not make sense to discourage even more the arrival of these cases in court. This study focuses on the analysis of the impact of judicial fees on litigation, thus reducing a potential "negative externality".

Spain seems to be an interesting economy to empirically study if court fees have clear impacts on judicial efficacy through their impact on litigation. On the one hand, Spain has one of the highest rates of litigation at the international level. Specifically, it would have the third highest litigation rate of the OECD (after Russia and the Czech Republic) if measured in per capita terms or the fourth highest if measured with respect to the GDP<sup>3</sup> (Palumbo et al. 2013a and 2013b). These results are represented in Figure 1. Litigation rates have been found to have a direct (and negative) impact on the efficacy of the judicial system. Not surprisingly, the trial length of a first instance dispute in Spain is 272 days, higher than the OECD's average (238 days). These results are in line with those published by the CEPEJ (2016), suggesting that Spanish courts would need 318 days to resolve a conflict, compared to an average of 237 days of the CEPEJ countries. If we follow the World Bank Doing Business indicators, Spanish courts would need 510 days to resolve a commercial dispute (compared to 499 days in Germany and 395 in France). All this, in turn, has several negative impacts on economic performance in the specific case of Spain, ranging from reduced entrepreneurship and firm size (García-Posada and Mora-Sanguinetti, 2014 and 2015) to distorted credit markets (Mora-Sanguinetti et al. 2017).

On the other hand, despite the high rates of litigation, Spain has traditionally lacked a system of court fees. The adoption of the fees in 2002 was significantly later than in other countries.<sup>4</sup> In that first moment, court fees were paid by legal entities and enterprises. Later, in 2012, the payment was extended to individuals. This generated a strong opposition by the legal profession and it was appealed several times before the tribunals<sup>5</sup> (see Section 2). Thus, the "new" fees survived in their original configuration only for a short time while they were abrogated in 2015 for individuals (since then, they were only enforced for legal entities and businesses). Later, in 2016,<sup>6</sup> the Constitutional Court of Spain considered to be unconstitutional a major part of the regulation of 2012.

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<sup>3</sup>The litigation rate is measured as the ratio of the number of new conflicts of civil nature brought to the courts in a given year in relation to the population. When the GDP is used, it is measured in PPP-purchasing power parity- in US dollars.

<sup>4</sup>Spain had no fees between 1986 (when the system of 1959 was abrogated) and 2002.

<sup>5</sup>For an extensive analysis of the case law on court fees, see Doménech (2017).

<sup>6</sup>Sentence of the Constitutional Court 140/2016 of 21 of July.



This article takes advantage of the bounded periods of enforcement of the fees (in their different configurations) and analyses empirically their impacts on the litigation rates (by type of civil procedure) and the congestion of the judicial system of Spain. In other words, we analyse whether the fees affected the "demand" for justice, as measured by the per capita litigation, and a measure of equilibrium in the functioning of the judicial system that takes into account both "demand" (entry of new cases) and "supply" factors (cases resolved). This is done for the civil jurisdiction. To do this, we collected a novel database of the workload of Spanish civil courts at the local level (50 provinces) by quarters, between 2001 and 2015. In summary, this article concludes that the different systems of court fees had some effects reducing both the litigation rates and the congestion of the courts. However, those results are far from homogenous. The congestion of the judicial system got significantly reduced only in a limited set of procedures. The effects also depended on the fees considered (2002 or 2012).

In addition, we must highlight that the effect of the fees were not homogenous among the Spanish provinces although the design of the judicial system is common to all of them. More specifically, the sectoral composition of the local economy or the local unemployment rate may play a role. This stresses that, overall, the impacts of court fees depended not only on the judicial structure but also on the type of procedure mostly used in the province and the macroeconomic conditions surrounding the courts. Therefore, this analysis has immediate policy implications.

The rest of the article is organized as follows: section 2 analyses the adoption of the two systems of court fees in Spain (2002 and 2012) and its evolution in the long term, paying particular attention to its partial abrogation (which took place, for individuals, in 2015). Section 3 provides the details on how we have built the database and the judicial indicators used in the econometric exercise. Section 4 presents our empirical strategy and the controls included in the estimations. Section 5 shows the results of the models and discusses the main findings. Finally, Section 6 concludes.

## 2 Court fees in the long term (1986-2015) in Spain

Since the abrogation of the court fees system of 1959<sup>7</sup>, there has been two recent schemes of court fees in Spain: the fees of the Law 53/2002<sup>8</sup> ("old" fee system) affecting the civil and the administrative jurisdictions and the "new" court fees adopted with the Law 10/2012<sup>9</sup> (extended to the labour jurisdiction).

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<sup>7</sup>Law 25/1986 of 24 of December, *de supresión de las tasas judiciales*.

<sup>8</sup>Law 53/2002, of 30 of December, *de Medidas Fiscales, Administrativas y del Orden Social*.

<sup>9</sup>Law 10/2012 of 20 of November, *por la que se regulan determinadas tasas en el ámbito de la Administración de Justicia y del Instituto Nacional de Toxicología y Ciencias Forenses*.

As a clarification, the Spanish judicial system is composed of four jurisdictions: civil, criminal, labor and the jurisdiction for suits under administrative Law (see Figure 2). The judges and magistrates of each jurisdiction have a certain degree of specialization and each jurisdiction is regulated by specific procedural regulations. Thus, for example, the "Civil Procedural Law" (which regulates the functioning of the civil jurisdiction) is different from the "Criminal Procedural Law" (which regulates the functioning of the criminal jurisdiction). The nature of the conflict will direct its resolution towards one or another jurisdiction. Thus, the civil jurisdiction resolves conflicts of private nature (between private companies, legal entities and individuals), the criminal jurisdiction resolves cases related to criminal behavior, the administrative jurisdiction resolves disputes related to the public administration and, finally, the labor jurisdiction deals with conflicts related with employment decisions (such as dismissals within a private company). Once inside a jurisdiction, the case will take the form of a specific procedure. In the Civil jurisdiction, the type of procedure depends partially on the subject and the amount. There are four types of procedure: the ordinary judgment, the verbal judgment, the payment procedure and the exchange and cheques procedure. For instance, an "ordinary judgment" is generally used if a case involves a sum of at least 6000 euros (see Section 3).

Figure 3 provides an outline of the court fees enforced in Spain through time and jurisdiction. The "old" court fees were in force between 1st January 2003 and 21 November 2012. The payer of these fees were only the legal entities and enterprises in the civil and the administrative jurisdictions. Fees were made up of a fixed part (which depended on the type of procedure) and a variable part, consisting of 0.5% of the amount involved (if the amount was below 1 million euros) and 0.25% if the amount was over 1 million. This variable part of the fee had a maximum of 6000 euros.

The "new" fee system entered into force on 22 November 2012, abrogated the "old" scheme and extended the payment to individuals, keeping them also for legal entities and enterprises. The "new" fees were payable in the social jurisdiction for the first time (as well as in the civil and administrative jurisdictions). As in the previous system, the fees were composed by a fixed part, by type of procedure and a variable part (with a maximum of 10000 euros) consisting of 0.5% of the amount involved up to 1 million euros and 0.25% if the amount was over 1 million. A consideration that can be made is that the ratio "fee / amount of the lawsuit" is higher in small claims (such as in the verbal procedure) compared to larger claims (as those resolved using the ordinary procedure).

As it was already discussed, court fees generated much controversy in the media in Spain. On the side of the legal profession, the media pressure against the fees was high, both at the level of individual lawyers and at the level of the

Bar Associations<sup>10</sup>. As Shavell (1997) highlights, the bar has interests against the policies which curtail demand for legal services. On the side of the judicial system, there were also judges opposed to the fees, but they had no margin to avoid charging them or to generate a boycott. Among the reasons why they had little room to intervene, we could cite the following: the laws passing the fees did not explicitly provide for postponement or fractionation of the payment of the fees and they did not allow to choose not collecting them in specific circumstances (they were, therefore, "automated"). We could mention a paper critical to the fees coming from the judicial side (Chaves García, 2013) although there were also voices in favour (Viguer Soler, 2010). In reaction to the fees of 2012, there were at least four *cuestiones de inconstitucionalidad* and five *recursos de inconstitucionalidad* before the Constitutional Court (see Doménech, 2017).

In a short time (around 3 months), the government decided to amend the "new" system through the Royal Decree-Law (RDL) 3/2013<sup>11</sup> (which entered into force on February 24, 2013). This reform reduced the variable part for individuals to 0.1% of the amount involved and established its maximum in 2000 euros. Finally, the RDL 1/2015<sup>12</sup> (which entered into force on 1 February 2015) abrogated the court fees for individuals ("*abrogation*" in Figure 3). Later, as it was mentioned, the Constitutional Court declared that a large part of the regulation of 2012 was unconstitutional.

This article investigates the impacts of court fees (both the "old" and the "new" systems) on the litigation rates and the efficacy of the courts of the civil jurisdiction. This article explores as well the preliminary effects of the abrogation which took place in 2015. The analysis of the effects in the administrative jurisdiction were covered in Martínez-Matute and Mora-Sanguinetti (2017).

It seems relevant for the analysis to note that the adoption of both the "old" and the "new" fees in Spain took place in a period of institutional stability as they did not coincide with other major legislative initiatives in the civil procedural regulations. In fact, the most important change in those regulations took place in 2000 with the new Civil Procedural Law (CPL) (Law 1/2000) which entered into force on January 8, 2001<sup>13</sup> (therefore, before the entry into force of the "old" fees analysed here). Moreover, none of the systems affected the rules about who should bear the payment of the fees: in all of their configurations,

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<sup>10</sup>As an example, the Madrid Bar Association supported a signature campaign through *change.org* ([www.change.org/stoptasas](http://www.change.org/stoptasas)). The campaign collected more than 200.000 signatures against the fees. The Bar Association of Barcelona conducted a campaign entitled "Stop taxes" available at <https://www.icab.cat/files/230-9281-IMAGEN/UnAnyDeDolUnAnydeTaxes-Campanya.jpg>.

<sup>11</sup>RDL 3/2013, of 22 of February, *por el que se modifica el régimen de las tasas en el ámbito de la Administración de Justicia y el sistema de asistencia jurídica gratuita*.

<sup>12</sup>RDL 1/2015, of 27 of February, *de mecanismo de segunda oportunidad, reducción de carga financiera y otras medidas de orden social*.

<sup>13</sup>This Law abrogated the "old" CPL of 1881.

the one who initiated the procedure paid the fee regardless if he turned out to be the winner of the conflict.<sup>14</sup>

### 3 Measuring litigation -and efficacy- rates in the Spanish civil jurisdiction

We have compiled data from the General Council of the Judiciary (CGPJ) at the court level, by type of procedure and on a quarterly basis (from the first quarter of 2001 to the fourth quarter of 2015). The database of the CGPJ provides statistical information on the real workloads of the courts and tribunals.

In this paper we analyze specifically the impact of court fees in the performance (and litigation rates) of the civil jurisdiction. There are several reasons why the analysis should be focused in this jurisdiction: it is the only jurisdiction for which there have been court fees throughout the whole period 2002-2015 and, as noted above, has not been affected by substantial changes in its procedural regulations or its fee-shifting rules (as happened to the administrative jurisdiction) (see Martínez-Matute and Mora-Sanguinetti, 2017). In more general terms, both the substantive and procedural regulations of the Civil jurisdiction are supplementary to those of other jurisdictions making this analysis useful for them.

A relevant issue for our analysis is the set of procedural rules which determine the relevant (competent) court. In summary, two companies that litigate in Spain cannot normally choose the province in which to file a claim<sup>15</sup> (see García-Posada and Mora-Sanguinetti, 2014 and 2015). Performing the analysis at the province level allows us to exploit information on some macroeconomic variables that seem relevant for controlling the experiment.

We will analyze the impact of the fees on the conflicts taking the form of a standard civil procedure (ordinary, verbal, payment or exchange). Figure 2 provides a simplified scheme of the Spanish Civil jurisdiction. The procedures analyzed in this paper are shown in grey. Conflicts in the Spanish civil jurisdiction are resolved, in first instance, by the first instance courts<sup>16</sup>. The specific type of procedure depends, in general terms, on the amount involved.<sup>17</sup> Ordinary judgments are used if the conflict involves a sum of at least 6000 euros. Verbal judgments take place when the amount is less than 6000 euros. Furthermore, some specific disputes are resolved through "simpler" and "faster"

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<sup>14</sup>Shavell (1982) argues that the composition of cases arriving to the tribunals may be different under different configurations of the "fee shifting rules".

<sup>15</sup>Articles 50 and 51 of the Civil Procedure Law limit the possibility of choosing the court in practice.

<sup>16</sup>Or "first instance and instruction" courts in small towns.

<sup>17</sup>Some exceptions apply: an ordinary judgment will be also used in certain cases (independently of the amount involved) such as in the appeal against decisions of the governing bodies of a company.

exchange and payment (*monitorio*) procedures. An exchange procedure will be used in the case of a conflict related to a bounced check, for instance. A payment procedure will be used if the plaintiff claims to have an unpaid invoice which can be presented before a judge.

The complexity and formalism of the procedures, as regulated in the Civil Procedural Law, increase with the amount involved (Mora-Sanguinetti, 2010), therefore the "ordinary" procedure is the most "formal" and "complex". That procedure is also focused on solving some specific enterprise conflicts. In contrast, the "payment" procedure is simpler: the plaintiff may act before a tribunal without the representation of a lawyer. Even though there is no quantitative information available about what type of entity (natural or legal persons) initiates each procedure, we have information on the total use of each procedure by quarter and province.

Figure 4 graphs the entry of new cases in the civil jurisdiction by type of procedure. There seems to be an increase in those numbers even after the adoption of the various systems of court fees. This may have to do with, on the one hand, the increase in the GDP (and the complexity of the Spanish economy in the long run) and, on the other hand, with the increase in workloads brought by the crisis environment in the last years. These observations seem to be consistent with previous findings by the literature. Following Palumbo et al. (2013a), the number of cases brought to the court system of a country is a function, among others, of the frequency of disputes in a society, which is influenced by the volume and complexity of economic transactions. In addition, the crisis (since 2008) may have increased litigation because during a recession there may be more breaches of contracts<sup>18</sup>. There may be also other factors which may affect the rate of litigation, such as the incentives affecting the market for lawyering or the complexity of the local economy (Mora-Sanguinetti and Garoupa, 2015). All this justifies the need to construct an econometric model taking into account all these factors.

First, we will estimate the impacts of court fees in the litigation rate per capita and by type of procedure. The litigation rate is obtained as the quotient of new cases (taking the form of a specific type of procedure, " $p$ ") brought to the courts divided by the population. The subscript " $j$ " denotes the province (we merge all the new cases of all the courts of the same province), and " $t$ " the quarter. With this measure we are estimating the impact of court fees on the "demand" for litigation.<sup>19</sup>

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<sup>18</sup>Although this is what is observed in the Spanish case, the interaction between litigation and the economic cycle is still being discussed in the literature. Under some assumptions, Ginsburg and Hoetker (2006) argue that litigation should increase in economic booming instead. Mora-Sanguinetti et al. (2017) analyze the effects of judicial performance on the credit market, and suggest that those effects, which show differences among the different phases of the economic cycle, may partially depend on the specific judicial procedure analyzed. In our sample, beginning in 2001, we cover several years of expansion and recession.

<sup>19</sup>On the right side of the equation we will include lawyers per capita as a control variable (see section 4).

$$\textit{Litigation rate}_{j,p,t} = \frac{\textit{New cases}_{j,p,t}}{\textit{Population}_{j,p,t}} \quad (1)$$

Then, we will estimate the impact of court fees on a classic measure of "efficacy" of the judicial system: the "congestion" rate, which we computed for each type of procedure [see, among others, García-Posada and Mora-Sanguinetti (2015)].

$$\textit{Congestion rate}_{j,p,t} = \frac{\textit{Pending cases}_{j,p,t-1} + \textit{New cases}_{j,p,t}}{\textit{Cases resolved}_{j,p,t}} \quad (2)$$

The congestion rate is defined as the ratio of the sum of pending cases (measured at the beginning of the quarter), plus the new cases measured in a specific quarter divided by the resolved cases in the same quarter. A lower congestion rate is related to a greater efficacy of the courts of the province and could be used as a "proxy" of the trial length. This measure could be considered, therefore, an "equilibrium" measure that takes into account both "demand" factors ("new cases") and "supply" factors ("cases resolved"). Figure 5 shows the average annual congestion rate in the civil jurisdiction by procedure.

## 4 Identification strategy

### 4.1 Capturing the effects of the adoption of court fees in the civil jurisdiction

We have built three dummy variables which capture the entry into force of the "old" court fees, the "new" court fees and the "abrogation" of the "new" fees for individuals. In order to avoid the risk of capturing the impacts of various systems at a time in each model, we restrict our period of analysis in each model to a window which contains only the time period before and after the date of entry into force of the previous or the next reform.

Thus, to capture the effect of the introduction of the first ("old") court fees' system we included a dummy variable that takes value 1 during the period in which that system was enforced in Spain (from 1st January 2003). Our period of analysis in this case is a window which contains years 2001 to 2012.

$$\textit{Reform 52/2002}_t = \begin{cases} 0 & \textit{if } t < 2003T1 \\ 1 & \textit{if } t \geq 2003T1 \end{cases} \quad (3)$$



For the analysis of the effects of the adoption of the "new" court fees in 2012, we analyzed the observations contained in the "window" between 2003 and 2015. The dummy variable takes the following values:

$$Reform\ 10/2012_t = \begin{cases} 0 & \text{if } t < 2013T1 \\ 1 & \text{if } t \geq 2013T1 \end{cases} \quad (4)$$

Finally, in order to analyze the effects of the "abrogation" of the "new" fees for individuals, we analyzed a window which contains the period 2003-2015. In this case, we included a dummy which takes the following values:

$$Reform\ 1/2015_t = \begin{cases} 0 & \text{if } t < 2015T1 \\ 1 & \text{if } t \geq 2015T1 \end{cases} \quad (5)$$

## 4.2 Control variables

As it was discussed in section 3, the volume of litigation and the rate of congestion of the courts may be the result of multiple factors not directly related to the adoption of court fees. Thus, first, we included controls for the macroeconomic environment of each province in each quarter: the income per capita (whereas the higher the income, the higher the litigation) and the sectoral composition of the economy of the province i.e. the weight of manufacturing, construction, agriculture and services (whereas sectoral composition may affect litigation).<sup>20</sup>

Secondly, we included the default rate (measured as the NPL ratio). The NPL ratio is the proportion of non-performing loans claims on the total available credit. To construct this variable, we obtained data from the Central Credit Register of the Banco de España (CIR), which contains information on all<sup>21</sup> Spanish loans to non-financial companies granted by credit institutions operating in Spain above a reporting threshold of 6000 euros. As loans to businesses are often higher than the threshold for registration, CIR provides in practice the entire population of loans to companies in Spain. We refer as "non-performing loan" a loan that is in default or close to being in default. The regulation of the Banco de España states that a loan is in this situation if the payment of principal or interest has been delayed for more than 90 days or there are circumstances that makes the full repayment of the loan unlikely.

In addition to those "macroeconomic" controls, we included in the models the number of companies, in per capita terms, to account for the "social com-

<sup>20</sup>Palumbo et al. 2013a, find evidence that points to lower litigation in the industrial sector.

<sup>21</sup>We are including any instrument through which banks can provide credit to businesses: financial loans, commercial loans, letters of credit, leasing, factoring, repos, securities lending and loans or credits transferred to third parties.



plexity” which can influence the rate of local litigation (Carmignani and Giacomelli, 2010, Mora-Sanguinetti and Garoupa, 2015), and finally we controlled by the presence of lawyers per capita in the province considered. There is evidence to suggest that lawyers and litigation rate may be correlated (although the relationship is not necessarily endogenous)<sup>22</sup>. To illustrate this issue, Figure 6 shows the very different size (on average) of the markets for lawyers at the provincial level in Spain. As a robustness check, we interacted the number of lawyers with the reforms in order to test if there are any differential effects because of the distinct enforcement environments at the local level. Results are shown in the Appendix (Table A.3.).

### 4.3 Identification model

We set up a regression model which relates our measures of litigation or judicial efficacy (the rate of court congestion) with one of the dummy variables specified in Section 4.1, the set of controls specified in Section 4.2 and provincial ”fixed effects”, which capture the characteristics of the Spanish provinces which do not vary over time or do so very slowly.

We also add a group of quarterly variables (Q2, Q3 and Q4) as a seasonal adjustment, as the entry rates of new conflicts are affected by a seasonal pattern related to the court’s work calendar. Thus, with these variables we aim to have seasonally adjusted series of litigation. Q2, Q3 and Q4, take the value 1 if quarter  $t$  is a second, third or fourth quarter within a specific year and 0 otherwise.

Our estimates are obtained fitting the following econometric model:

$$Litigation_{j,p,t} = \alpha_j + \beta_1 Reform_{52/2002_{jt}} + \sum_{k=1}^k \delta_k Control_{jt}^k + \phi_1 Q2_t + \phi_2 Q3_t + \phi_3 Q4_t + \epsilon_{jpt} \quad (6)$$

$Litigation_{jpt}$  is the rate of litigation for each civil procedure  $p$  (ordinary, verbal, payment, or exchange procedures),  $\alpha_j$  are the provincial fixed effects,  $Control_{jt}^k$  is a matrix which includes the controls explained in section 4.2 and  $\epsilon_{jpt}$  is the error term of the model.

The model will be estimated including the whole set of 50 Spanish provinces, but we also estimated the model excluding Madrid and Barcelona in order to have quasi-experiments. Results in this specific case are shown in the Appendix (Table A.2). Madrid and Barcelona host the headquarters of the largest law

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<sup>22</sup>In addition to the above references, see Hanssen (1999) or Buonanno and Galizzi (2012).

firms (Mora-Sanguinetti and Garoupa, 2015) of Spain and the main banks. Due to the high litigation generated by the banking system activity during the crisis, we explored if the results were affected by the litigation rates of these two provinces.

In all the regressions, errors are clustered at the province level to be robust to heteroskedasticity and serial correlation [Angrist and Pischke, (2009), Wooldridge, (2010)]. The inclusion of fixed effects by province and our set of dummy variables per quarter help to partially mitigate the omitted variable bias.

As a robustness check, we have also estimated the model with the inclusion of the reforms using one quarter lag and one quarter lead alternatively. Reforms are generally announced in advance. Therefore litigation may be reactive even before the introduction of the fee. We should note that no significant results were found when we included one quarter lag or lead to each of the reforms<sup>23</sup>.

## 5 Estimation results

### 5.1 Impacts of the "old" court fees (Law 52/2002)

Table 1 shows the results of the models which estimate the effects of the "old" system of court fees (Law 52/2002). The adoption of the "old" court fees implied a significant reduction in per capita litigation in the case of verbal and exchange procedures. Furthermore, the "old" system was significantly associated with an increase in the litigation taking the form of payment procedures (*monitorios*). Conceivably, litigation taking the form of a payment procedure may react differently when confronted to an increase in the costs to access the judicial system. There are several reasons for that: firstly, the "monitorios" were new procedures (born with the new CPL of 2000) with some attractive features. They were simpler and faster to resolve (as it was mentioned in Section 3). As "new" procedures, they absorbed an important part of the new conflicts arriving to the courts (Mora-Sanguinetti, 2010). Also, as they were "simpler" and potentially faster than the rest of old procedures, they were "cheaper". Therefore, they may absorb litigation when the "price" to use the judicial system increases. In summary, we may be observing a "safe haven" effect by which the new payment procedures concentrate higher demand as a result of the increase in the "price" to litigate.

Finally, the "old" court fees do not seem to have a significant effect in reducing judicial congestion rates except for the case of the ordinary procedures (which got reduced by a 3%).

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<sup>23</sup>A table with results is not included in this version of the paper, but it is available upon request

If we focus solely on the analysis of the provinces which are most congested in only one of the procedures (32 provinces out of 50) (see Table 2), we observed that the effects found above disappear. This shows that the effects of the old rates are concentrated in the provinces without serious problems of judicial congestion.

As an overall assessment, the previous paragraphs explain that the effect of the fees, far from being homogenous, depend on the type of procedure and the workload of the courts. This analysis should be completed highlighting that the effects are also dependent on the macroeconomic conditions surrounding the local courts, such as the sectoral composition of the economy.

## 5.2 Impacts of the "new" court fees (Law 10/2012)

Results are shown in Table 3. The adoption of the "new" fees seems to be related to a significant reduction in the litigation taking the form of exchange and payment procedures. In contrast, the "new" fees were positively related to the litigation rates in the form of ordinary procedures. As it was discussed, the "new" fees forced individuals to pay for the first time. Thus, we should expect to observe higher effects precisely in the most used procedures by individuals: the procedures involving lower amounts, which are all with the exception of the ordinary procedures.

Finally, these fees significantly reduced the congestion of the judicial system when solving verbal, exchange and payment procedures. There is another effect in the same direction: As the fees were composed by a fixed part and a variable part, it is reasonable to assume that the ratio between the fees and the amount of the claim is higher in those cases with a lower amount of the claim (for instance, in the verbal cases). Thus, probably, in those cases the deterrent efficacy of the reform might be more significant.

If we restrict the sample to the most congested provinces in one of procedures (33 out of 50) the previous results get heightened (see Table 4). We can provide two explanations for this effect: on the one hand, the congestion is a cost for the litigants (as we can expect that a conflict will take more time to be solved in a congested court). Therefore, in the most congested provinces, the direct cost of congestion was joined by the cost implied by the adoption of the fees after they were adopted. On the other hand, we should think about the "quality" or "merit" (composition) of the conflicts arriving to the court system in each province: it is conceivable that in the most congested provinces there is a larger presence of "non-meritorious" cases which may be more affected by the fees.<sup>24</sup>

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<sup>24</sup>Unfortunately, there is no specific statistical information on the composition of cases which arrive to the courts, so we cannot control for that composition in the econometric analysis.

### 5.3 The effect of the abrogation of the court fees to individuals

Table 5 shows the results of the models which analyze the abrogation of the court fees made by the RDLaw 1/2015<sup>25</sup>. As it could be expected, the effect of the Reform 1/2015 softens the effect of the previous changes in the legislation on litigation and on the congestion rate. The congestion rate and the litigation taking the form of verbal and exchange procedures increase after the abrogation of the fees for individuals.

### 5.4 A note on the years 2016 and 2017

The judgment of the Constitutional Court 140/2016 declared unconstitutional the variable part of the court fees in force in the civil jurisdiction. The aforementioned ruling was published in the BOE (Official Gazette of the State) of August 15, 2016, having general effects since then. It seems appropriate to analyze if the publication of the judgment had effects on the rates of litigation and congestion. At the national level there appear to be no substantial changes in congestion rates for 2016 and 2017 (although it should be noted that congestion increased slightly in 2016 and decreased slightly again in 2017). Neither do there seem to be relevant changes between the different types of procedure. It should be clarified that a period of two years is too small to observe important trend changes.

## 6 Conclusions

This article analyzes empirically the effects of the adoption of court fees, which are a common means of judicial management in Europe. More specifically, this research studies the impacts of the fees on litigation in Spain. The Spanish economy shows very high litigation rates compared to the rest of OECD countries. Moreover, the fee systems are recent and are limited in time, which facilitates their empirical analysis. Consequently, in this paper we fit several econometric models which exploit variations observed across time and provinces in Spanish real judicial data (both litigation and congestion rates are considered). With reference to prior literature, we also take into account several macroeconomic variables which may affect the litigation rates at the local level.

The paper examines both the system of court fees passed in 2002 (which enforced legal entities and enterprises) and the fee system of 2012, which extended the fees to individuals. This second system was fully in force for a short period of time as it was abrogated in 2015 for individuals.

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<sup>25</sup>No effects were found when analyzing the partial reform introduced by RDL 3/2013.

This research leads to the general conclusion that the fees, although reduced both litigation and judicial congestion rates, did not have homogeneous impacts and did not always coincide with the desires of the legislator. According to the results, the effects of the fees are dependent on the type of procedure (and thus, of the user of the judicial system) and were affected by the macroeconomic environment of the courts. This research also allows to interpret some indirect effects: the simpler or cheaper procedures (such as the "*proceso monitorio*") may be transformed into "safe havens" of litigation as a reaction against the increased costs of litigation.

More specifically, each type of judicial procedure, which is different in terms of complexity, seems to react differently to increased barriers to litigation. The adoption of the system of 2002 reduced litigation under the form of verbal or exchange judgments but increased litigation in the case of the "payment procedure" (considered "simpler" and "faster"). The extension of the fees in 2012 appears to be related to a reduction in the litigation in the form of exchange judgments and payment procedures but had reverse effects on the ordinary procedures (which were affected directly by the system of 2012). The latter effects get heightened in the most congested provinces. Finally, as it was expected, the abrogation of the courts fees for individuals in 2015 increased again the congestion in the civil jurisdiction, partially neutralizing the impact of the previous reforms.

As has been highlighted, this article focuses on the analysis of the impact of court fees on litigation. Therefore, it emphasizes their effectiveness in reducing a negative externality. Future research should analyze the impact of the fees in terms of generating a potential barrier to the arrival of "meritorious cases" to the judicial system (reducing jurisprudence and therefore implying a negative effect on the judicial system).

## References

- [1] Angrist, J.D., Pischke, J.-S. (2009). *Mostly Harmless Econometrics: An Empiricist's Companion*. Princeton University Press, Princeton.
- [2] Buonanno, P. y M. M. Galizzi (2012). Advocatus, et non latro? Testing the Supplier-Induced-Demand Hypothesis for Italian Courts of Justice. *Carlo Alberto Notebooks* 250.
- [3] Carmignani, A. and S. Giacomelli. (2010). *Too many Lawyers? Litigation in Italian Civil Courts*. Temi di Discussione 745. Banca d'Italia.
- [4] CEPEJ - European Commission for the Efficiency of Justice (2016). *European judicial systems. Efficiency and quality of justice*. Edition 2016 (2014 data). CEPEJ STUDIES No. 23.
- [5] Chaves García, J. R. (2013). La economía procesal como contrapeso a las tasas judiciales y otras rémoras. *Actualidad Jurídica Aranzadi*, 855.
- [6] Chemin, M. (2012). Does Court Speed Shape Economic Activity? Evidence from a Court Reform in India, *Journal of Law, Economics & Organization*, 28(3), 460: 485.
- [7] Coase, R. H. (1960). The problem of social cost, *The Journal of Law and Economics*, 3, pp. 1-44.
- [8] Djankov, S., R. La Porta, F. Lopez-de-Silanes and A. Shleifer (2003). Courts. *The Quarterly Journal of Economics*, 453-517.
- [9] Doménech, G. (2017). Las tasas judiciales a juicio. Comentario crítico de la Sentencia del Tribunal Constitucional 140/2016, de 21 de julio. *Indret*, enero 2017.
- [10] Esposito, G., Lanau, S. and S. Pompe (2014). *Judicial System Reform in Italy - A Key to Growth*. IMF Working Papers 14/32, International Monetary Fund.
- [11] Esteller-Moré, A. (2002). La configuración de una tasa judicial: Análisis teórico. *Investigaciones Económicas* 26 (3), 525-549.
- [12] García-Posada, M. and J. S. Mora-Sanguinetti (2014). Entrepreneurship and enforcement institutions: disaggregated evidence for Spain. *European Journal of Law and Economics* 40 (1), 49-74.
- [13] García-Posada, M. and J. S. Mora-Sanguinetti (2015). Does (average) size matter? Court enforcement, business demography and firm growth. *Small Business Economics Journal* 44 (3), 639-669.
- [14] Giacomelli, S., and C. Menon (2017). Does weak contract enforcement affect firm size? Evidence from the neighbour's court. *Journal of Economic Geography*, 17, 6, 1, pp. 1251-1282

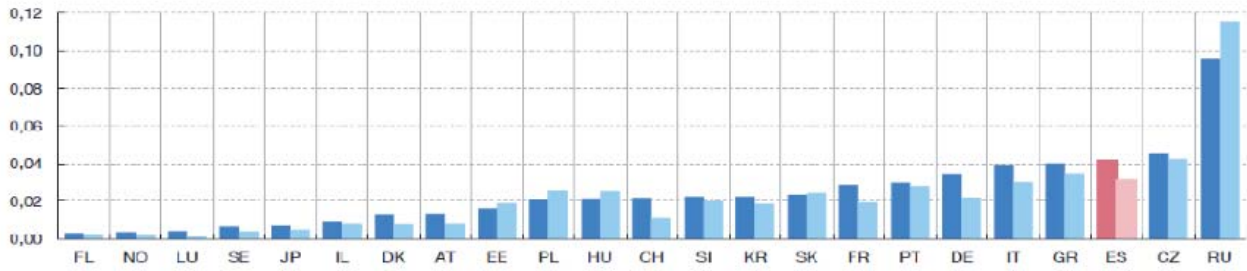


- [15] Ginsburg, T. and G. Hoetker (2006). The Unreluctant Litigant? An Empirical Analysis of Japan's Turn to Litigation. *The Journal of Legal Studies*, 35, 31-59.
- [16] Hanssen, F. (1999). The Effects of Judicial Institutions on Uncertainty and the Rates of Litigation: The Election versus Appointment of State Judges. *The Journal of Legal Studies* 28, 205-32.
- [17] Hodges, C., Vogenauer, S. and M. Tulibacka (eds.), (2010). *The Costs and Funding of Civil Litigation: A Comparative Perspective*. Hart Publishing.
- [18] Maher, B. S. (2010). The Civil Judicial Subsidy. *Indiana Law Journal* 85, pp. 1527-1556.
- [19] Martínez-Matute, M. and J. S. Mora-Sanguinetti (2017). Un análisis económico de la jurisdicción contencioso-administrativa: el efecto del nuevo criterio de costas y las tasas judiciales. *Papeles de Economía Española* 151, 88-101.
- [20] Mery Nieto, R. (2015). Court Fees: Charging the User as a Way to Mitigate Judicial Congestion. *The Latin American and Iberian Journal of Law and Economics* 1(1), Article 7.
- [21] Mokyr, J. (2010). "Entrepreneurship and the industrial revolution in Britain", in D. S. Landes, J. Mokyr and W. J. Baumol (eds.) *The Invention of Enterprise: Entrepreneurship from Ancient Mesopotamia to Modern Times*, Princeton, NJ: Princeton University Press.
- [22] Mora-Sanguinetti, J. S. (2010). A characterization of the judicial system in Spain: analysis with formalism indices. *Economic Analysis of Law Review* 1 (2), 210-240.
- [23] Mora-Sanguinetti, J. S. (2013). El funcionamiento del sistema judicial: nueva evidencia comparada. *Boletín Económico-Banco de España* 11, 57-67.
- [24] Mora-Sanguinetti, J. S. and N. Garoupa (2015). Do lawyers induce litigation? Evidence from Spain, 2001-2010. *International Review of Law and Economics* 44, 29: 41.
- [25] Mora-Sanguinetti, J. S., Martínez-Matute, M. and M. García-Posada (2017). Credit, crisis and contract enforcement: evidence from the Spanish loan market. *European Journal of Law and Economics* 44 (2), 361-383.
- [26] Mora-Sanguinetti, J.S. and R. Spruk (2018). *Industry vs services: do enforcement institutions matter for specialization patterns? Disaggregated evidence from Spain*. Working Paper 1812 Banco de España.
- [27] North, D. C. (1990). *Institutions, institutional change and economic performance*, Cambridge University Press, Cambridge.



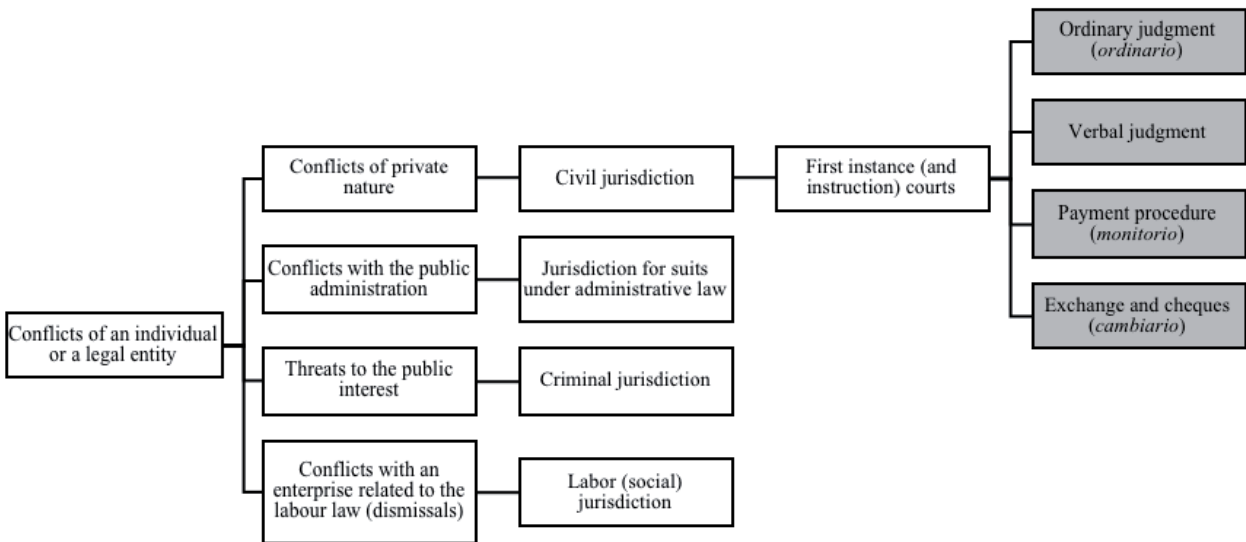
- [28] North, D. C. (1994). Performance through time, *The American Economic Review*, 84, pp. 359-368.
- [29] Nunn, N. (2007). Relationship-Specificity, Incomplete Contracts and the Pattern of Trade. *The Quarterly Journal of Economics* 122 (2). 569-600.
- [30] Palumbo, G., Giupponi, G., Nunziata, L. and J. S. Mora-Sanguinetti (2013a). *The Economics of Civil Justice: New Cross-Country Data and Empirics*. OECD Economics Department Working Papers No. 1060.
- [31] Palumbo, G., Giupponi, G., Nunziata, L. and J. S. Mora-Sanguinetti (2013b). *Judicial performance and its determinants: a cross-country perspective*. OECD Economic Policy Paper No. 5.
- [32] Rickman, N. and D. Tzavara (2005). Optimal Pricing of Court Services. *European Journal of Law and Economics* (2005) 20 (1). 31-41.
- [33] Shavell, S. (1982). Suit, Settlement and Trial: A Theoretical Analysis under Alternative Methods for the Allocation of Legal Costs. *The Journal of Legal Studies* 11(1), 55-81.
- [34] Shavell, S. (1997). The Fundamental Divergence between the Private and the Social Motive to Use the Legal System. *The Journal of Legal Studies* 26 (2), 575-612.
- [35] Shvets, J. (2013) Judicial Institutions and Firms' External Finance: Evidence from Russia, *Journal of Law, Economics and Organization* 29(4), 735-764.
- [36] Viguer Soler, P. L. (2010). Algunas propuestas para la reducción de la litigiosidad y la agilización de los procedimientos. *La Ley* 8789/2010.
- [37] Wooldridge, J.M., (2010). *Econometric Analysis of Cross Section and Panel Data*. MIT Press Books, The MIT Press.

**Figure 1.** Litigation rates *per capita* and litigation rates with respect to the GDP (civil jurisdiction)



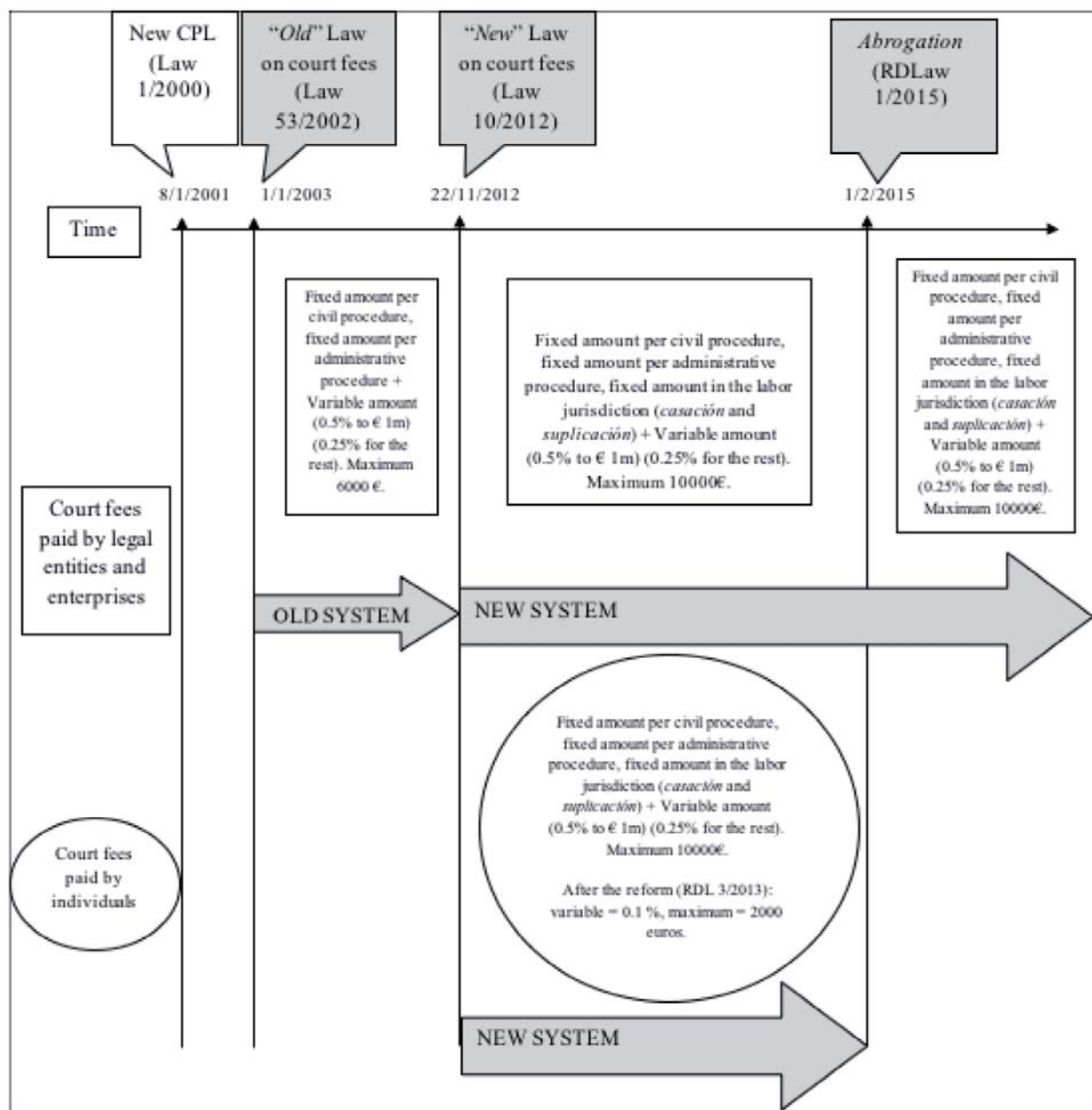
Source : Mora-Sanguinetti(2013) and Palumbo *et al.* (2013 a and 2013b)  
 Note: In dark blue: litigation rates *per capita*. In light blue: litigation rates to the GDP (corrected by PPP)

**Figure 2.** Simplified scheme of the Spanish judicial system



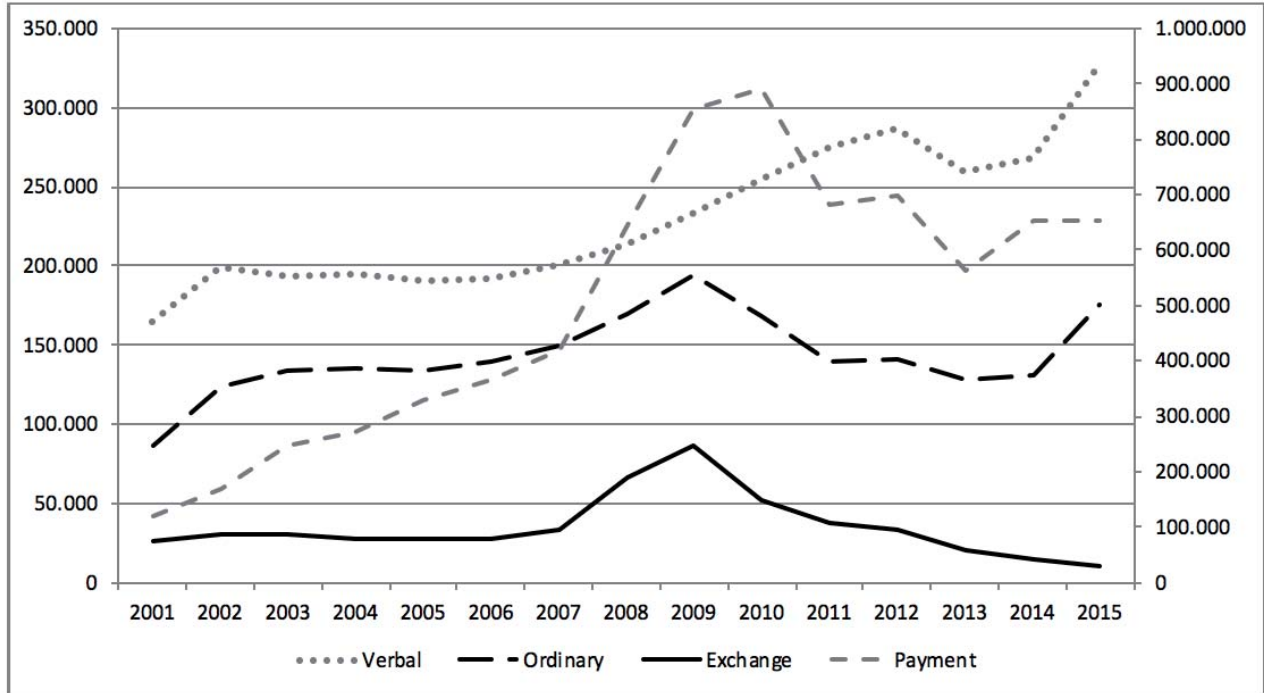
Source: Own elaboration

**Figure 3. The system of court fees in Spain after 2002**



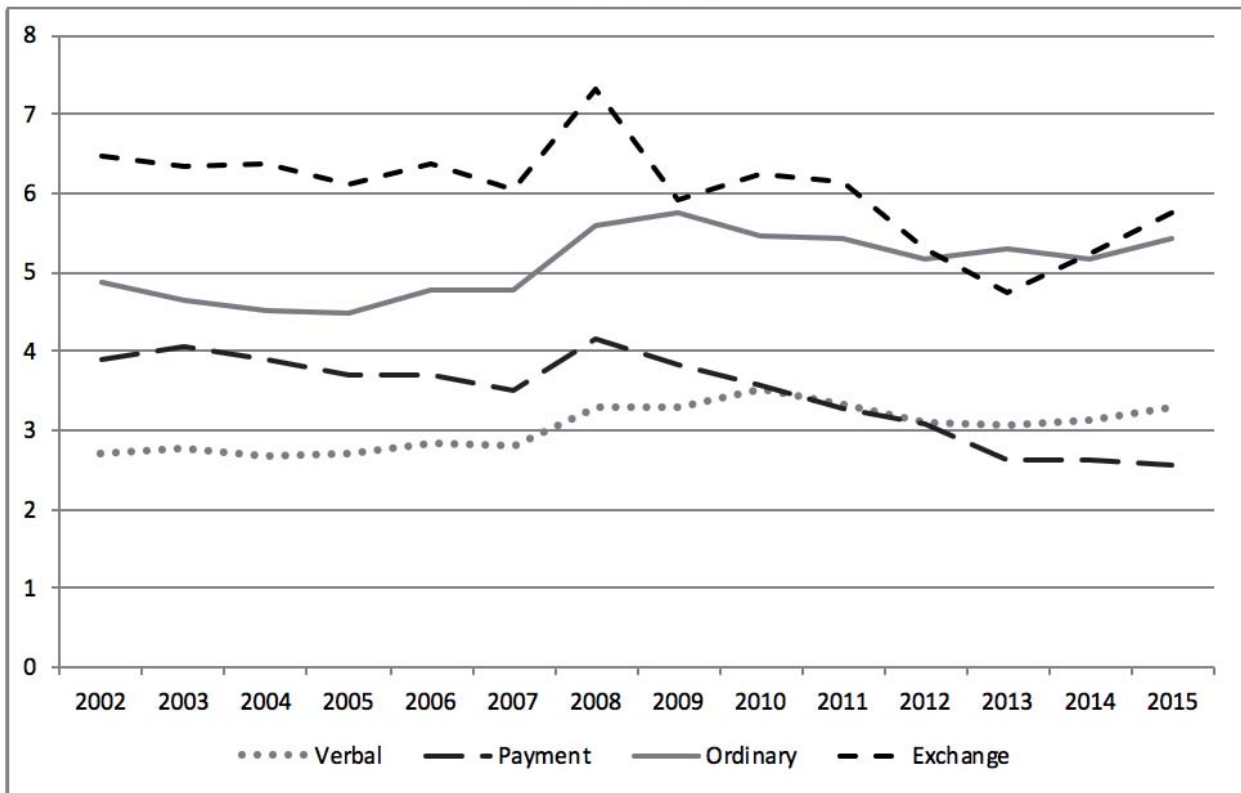
Source : Own elaboration

**Figure 4.** Entry of new cases in the civil jurisdiction by procedure type (annual sum of quarterly data)



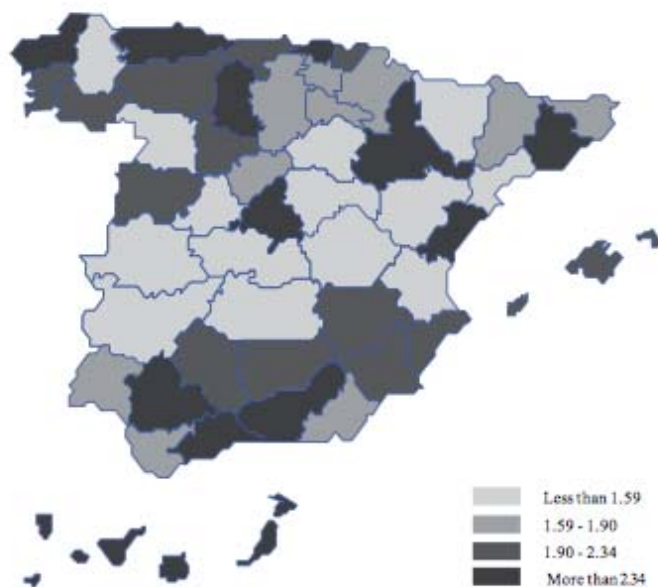
Source: Own elaboration using CGPJ data.  
 Note: Payment cases are measured in the right axis. All others are measured in the left axis.

**Figure 5.** Congestion rates in the civil jurisdiction by procedure (annual average of quarterly data)



Source: Own elaboration using CGPJ data

**Figure 6.** Average number of lawyers (\*1000) per capita by province (2000-2015)



*Source:* Own elaboration using data from the census of the CGAE (Consejo General de la Abogacía Española).

**Table 1. Effects of the “old system” of court fees**

VARIABLES	PERIOD: 2001-2012							
	New cases (per capita)				Congestion rate			
	Verbal	Payment	Ordinary	Exchange	Verbal	Payment	Ordinary	Exchange
<b>Reform 52/2002</b>	-0.0635*** (0.0156)	0.394*** (0.110)	0.0110 (0.0130)	-0.0427*** (0.0131)	0.0230 (0.0617)	0.0127 (0.0795)	-0.336*** (0.109)	-0.307 (0.326)
<b>Non-performing loan ratio</b>	0.956*** (0.136)	-0.867 (0.715)	-0.543*** (0.112)	-0.469*** (0.110)	0.0674 (0.552)	-0.971 (0.767)	-0.697 (0.726)	-0.309 (1.825)
<b>Lawyers per capita</b>	1.193 (2.890)	-66.89*** (12.97)	-4.705** (2.078)	-5.284** (2.320)	-18.17** (8.044)	2.324 (16.00)	-25.20 (15.98)	-10.90 (33.64)
<b>Number corporations per capita</b>	-3.457 (2.908)	61.10** (26.23)	16.71*** (3.735)	15.40*** (4.009)	27.58*** (9.799)	34.65** (17.23)	65.55*** (20.49)	28.99 (31.14)
<b>GDP per capita</b>	0.000154 (0.00501)	0.101** (0.0464)	-0.00275 (0.00411)	0.00134 (0.00407)	-0.00543 (0.0131)	-0.0379 (0.0237)	0.00143 (0.0255)	0.0617 (0.0492)
<b>Manufacturing</b>	-0.00499 (0.00353)	-0.0579*** (0.0206)	0.00153 (0.00295)	0.000512 (0.00399)	-0.0131 (0.0188)	-0.0196 (0.0192)	-0.0210 (0.0262)	-0.0226 (0.0476)
<b>Construction</b>	-0.0119*** (0.00396)	-0.161*** (0.0279)	-0.00696 (0.00418)	-0.0126*** (0.00336)	-0.0326 (0.0216)	-0.0201 (0.0262)	-0.0910*** (0.0316)	-0.00273 (0.0403)
<b>Services</b>	0.00610** (0.00272)	0.0945*** (0.0153)	0.00832*** (0.00208)	0.00773** (0.00295)	0.0326** (0.0123)	-0.0401*** (0.0145)	0.0329** (0.0140)	-0.0720* (0.0398)
<b>Second quarter</b>	0.0102 (0.00668)	-0.0223 (0.0282)	0.0192*** (0.00520)	-0.000981 (0.00247)	-0.123*** (0.0204)	-0.234*** (0.0361)	-0.113*** (0.0325)	-0.180** (0.0821)
<b>Third quarter</b>	-0.312*** (0.0136)	-0.778*** (0.0461)	-0.217*** (0.00764)	-0.0653*** (0.00522)	1.127*** (0.0467)	0.804*** (0.0584)	1.765*** (0.0727)	1.990*** (0.184)
<b>Fourth quarter</b>	0.0176** (0.00822)	0.0826** (0.0333)	0.0199*** (0.00715)	0.00807** (0.00383)	0.106*** (0.0307)	0.152*** (0.0411)	0.149*** (0.0428)	0.550*** (0.129)
<b>Constant</b>	1.287*** (0.243)	-6.768*** (1.379)	-0.660*** (0.184)	-1.096*** (0.279)	-0.497 (1.264)	5.116*** (1.446)	-0.140 (1.531)	7.772** (3.122)
<b>Observations</b>	2,145	2,145	2,145	2,145	2,145	2,145	2,145	2,145
<b>R2</b>	0.660	0.628	0.473	0.265	0.529	0.235	0.503	0.144
<b>Number of provinces</b>	50	50	50	50	50	50	50	50



**Table 2. Effects of the “old system” in the most congested provinces**

VARIABLES	MORE CONGESTED PROVINCES AT LEAST IN ONE AREA (1)			
	Congestion rate			
	Verbal	Payment	Ordinary	Exchange
<b>Reform 52/2002</b>	0.0298 (0.0928)	0.0733 (0.118)	-0.275 (0.168)	-0.473 (0.543)
<b>Non-performing loan ratio</b>	-0.236 (0.696)	-0.752 (0.952)	-1.400 (0.868)	-0.282 (2.359)
<b>Lawyers per cápita</b>	-19.10** (7.785)	10.57 (6.666)	-23.12* (11.61)	16.02 (26.11)
<b>Number corporations per cápita</b>	20.53 (13.18)	46.55 (34.21)	54.13* (27.91)	24.11 (47.40)
<b>GDP per cápita</b>	0.0140 (0.0289)	-0.0922 (0.0628)	0.0307 (0.0536)	0.113 (0.137)
<b>Manufacturing</b>	-0.0205 (0.0254)	-0.0206 (0.0276)	-0.0369 (0.0369)	-0.0172 (0.0676)
<b>Construction</b>	-0.0353 (0.0255)	-0.0209 (0.0283)	-0.0980** (0.0364)	-0.0304 (0.0495)
<b>Services</b>	0.0389** (0.0147)	-0.0332* (0.0175)	0.0413** (0.0157)	-0.0910* (0.0535)
<b>Second quarter</b>	-0.135*** (0.0301)	-0.235*** (0.0505)	-0.111** (0.0441)	-0.135 (0.122)
<b>Third quarter</b>	1.276*** (0.0510)	0.897*** (0.0736)	1.973*** (0.0866)	2.350*** (0.250)
<b>Fourth quarter</b>	0.159*** (0.0377)	0.192*** (0.0539)	0.205*** (0.0559)	0.691*** (0.182)
<b>Constant</b>	-0.480 (1.527)	5.248** (1.971)	0.245 (1.748)	9.455** (4.052)
Observations	1,368	1,368	1,368	1,368
R-squared	0.579	0.236	0.531	0.147
Number of province_id	32	32	32	32

(1) Provinces with a higher congestion rate at least in one of the procedures: Albacete, Alicante, Almería, Baleares, Barcelona, Burgos, Cádiz, Castellón, Ciudad Real, Córdoba, Cuenca, Cáceres, Girona, Granada, Guadalajara, Huelva, Huesca, Jaén, Las Palmas, Lérida, Madrid, Málaga, Murcia, Palencia, Pontevedra, S.C.Tenerife, Segovia, Sevilla, Soria, Tarragona, Teruel, Toledo, Valencia y Ávila.



**Table 3. Effects of the “new system” of court fees**

VARIABLES	PERIOD: 2003-2013							
	New cases (per capita)				Congestion rate			
	Verbal	Payment	Ordinary	Exchange	Verbal	Payment	Ordinary	Exchange
<b>Reform 10/2012</b>	-0.0230 (0.0191)	-0.490*** (0.115)	0.0867** (0.0368)	-0.0467*** (0.0138)	-0.289*** (0.0789)	-0.504*** (0.0805)	0.0760 (0.138)	-0.649** (0.246)
<b>Non-performing loan ratio</b>	0.137 (0.112)	-4.021*** (0.720)	-1.052*** (0.144)	-0.663*** (0.109)	-0.306 (0.562)	-0.834 (0.653)	-1.932** (0.749)	-0.923 (1.369)
<b>Lawyers per cápita</b>	1.319 (2.888)	-65.64*** (19.13)	-5.664** (2.603)	-4.871* (2.497)	-21.09** (8.754)	-4.603 (16.81)	-28.50** (13.82)	-30.36 (32.62)
<b>Number corporations per cápita</b>	3.530 (2.593)	143.6*** (22.72)	27.36*** (4.447)	22.27*** (3.567)	33.56*** (9.435)	41.98* (23.33)	94.54*** (20.66)	75.59* (39.44)
<b>Unemployment rate</b>	1.253*** (0.207)	11.41*** (1.342)	1.200*** (0.197)	0.954*** (0.186)	2.424*** (0.841)	0.610 (1.233)	4.154*** (1.477)	0.745 (2.304)
<b>Manufacturing</b>	-0.00931** (0.00350)	-0.0759*** (0.0233)	-0.000221 (0.00380)	0.00102 (0.00429)	-0.0132 (0.0160)	0.00227 (0.0202)	-0.0256 (0.0233)	-0.00716 (0.0489)
<b>Construction</b>	-0.00977** (0.00426)	-0.0915*** (0.0283)	-0.00617 (0.00446)	-0.00617 (0.00420)	-0.0144 (0.0219)	-0.0111 (0.0293)	-0.0675** (0.0286)	-0.0138 (0.0428)
<b>Services</b>	0.000970 (0.00290)	0.0519*** (0.0154)	0.000901 (0.00308)	0.00508 (0.00319)	0.0215* (0.0117)	-0.0340* (0.0171)	0.0178 (0.0156)	-0.0557 (0.0462)
<b>Second quarter</b>	0.0270*** (0.00709)	0.0715** (0.0304)	0.0402*** (0.00706)	0.000809 (0.00269)	-0.107*** (0.0190)	-0.158*** (0.0350)	-0.0741* (0.0370)	-0.301*** (0.0954)
<b>Third quarter</b>	-0.296*** (0.0130)	-0.674*** (0.0389)	-0.180*** (0.00851)	-0.0582*** (0.00505)	1.232*** (0.0496)	0.820*** (0.0579)	1.955*** (0.0768)	1.832*** (0.147)
<b>Fourth quarter</b>	0.0298*** (0.00881)	0.199*** (0.0346)	0.0346*** (0.00977)	0.0101** (0.00409)	0.181*** (0.0353)	0.272*** (0.0448)	0.284*** (0.0481)	0.537*** (0.127)
<b>Constant</b>	0.990*** (0.273)	-9.103*** (1.508)	-1.087*** (0.293)	-1.616*** (0.314)	-0.834 (1.184)	2.848* (1.671)	-2.225 (1.450)	4.484 (4.056)
<b>Observations</b>	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
<b>R2</b>	0.647	0.606	0.447	0.355	0.543	0.317	0.543	0.180
<b>Number of provinces</b>	50	50	50	50	50	50	50	50

**Table 4. Effects of the “new system” in the most congested provinces**

VARIABLES	MORE CONGESTED PROVINCES AT LEAST IN ONE AREA (1)			
	Congestion rate			
	Verbal	Payment	Ordinary	Exchange
<b>Reform 10/2012</b>	-0.369*** (0.0893)	-0.628*** (0.0994)	-0.0985 (0.164)	-0.777** (0.330)
<b>Non-performing loan ratio</b>	-0.421 (0.694)	-0.719 (0.809)	-2.047** (0.908)	-0.880 (1.755)
<b>Lawyers per cápita</b>	-23.50** (8.734)	-7.351 (15.97)	-29.24** (13.51)	-22.83 (28.31)
<b>Number corporations per cápita</b>	32.23** (13.38)	38.09 (32.96)	92.75*** (27.91)	82.33 (54.94)
<b>Unemployment rate</b>	2.685** (1.070)	0.854 (1.520)	4.141** (1.846)	0.0629 (2.975)
<b>Manufacturing</b>	-0.0203 (0.0208)	-0.00319 (0.0264)	-0.0425 (0.0313)	-0.0106 (0.0602)
<b>Construction</b>	-0.0142 (0.0261)	-0.0153 (0.0349)	-0.0756** (0.0345)	-0.0479 (0.0500)
<b>Services</b>	0.0260* (0.0141)	-0.0357* (0.0210)	0.0219 (0.0179)	-0.0635 (0.0626)
<b>Second quarter</b>	-0.135*** (0.0250)	-0.168*** (0.0509)	-0.107** (0.0490)	-0.313** (0.142)
<b>Third quarter</b>	1.343*** (0.0610)	0.882*** (0.0779)	2.089*** (0.0997)	2.025*** (0.215)
<b>Fourth quarter</b>	0.217*** (0.0474)	0.320*** (0.0610)	0.322*** (0.0641)	0.560*** (0.185)
<b>Constant</b>	-0.828 (1.497)	3.672 (2.236)	-1.638 (1.767)	5.829 (5.703)
<b>Observations</b>	1,320	1,320	1,320	1,320
<b>R2</b>	0.577	0.294	0.555	0.173
<b>Number of provinces</b>	33	33	33	33

(1) Provinces with a higher congestion rate at least in one of the procedures: Albacete, Alicante, Almería, Baleares, Barcelona, Burgos, Cádiz, Castellón, Ciudad Real, Córdoba, Cuenca, Gerona, Granada, Guadalajara, Huelva, Huesca, Jaén, Las Palmas, Lérida, Madrid, Málaga, Murcia, Orense, Palencia, S.C.Tenerife, Salamanca, Segovia, Sevilla, Tarragona, Teruel, Toledo, Valencia y Ávila

**Table 5. Abrogation of the court fees for individuals**

VARIABLES	PERIOD: 2003-2015							
	New cases (per capita)				Congestion rate			
	Verbal	Payment	Ordinary	Exchange	Verbal	Payment	Ordinary	Exchange
<b>Reform 10/2012</b>	0.222*** (0.0184)	0.523*** (0.0516)	-0.0837** (0.0328)	-0.128*** (0.00914)	0.0893* (0.0514)	-1.019*** (0.0738)	0.225** (0.0997)	-1.172*** (0.190)
<b>Reform 1/2015</b>	0.272*** (0.0714)	0.166** (0.0730)	0.188*** (0.0500)	-0.0517*** (0.00370)	0.179** (0.0672)	-0.0803* (0.0430)	0.146 (0.163)	0.734*** (0.251)
<b>Lawyers per cápita</b>	15.46** (6.365)	44.88 (26.98)	-7.187 (6.393)	0.646 (2.086)	15.26 (21.25)	-25.16 (28.96)	6.116 (19.93)	-88.60 (76.19)
<b>Second quarter</b>	0.0622*** (0.0162)	0.0103 (0.0190)	0.0541*** (0.00897)	-0.00455*** (0.00169)	-0.0400* (0.0206)	-0.195*** (0.0299)	-0.00563 (0.0321)	-0.201*** (0.0707)
<b>Third quarter</b>	-0.289*** (0.0131)	-0.653*** (0.0279)	-0.182*** (0.00685)	-0.0579*** (0.00310)	1.246*** (0.0480)	0.730*** (0.0479)	1.975*** (0.0685)	1.789*** (0.132)
<b>Fourth quarter</b>	0.0170** (0.00805)	0.0939*** (0.0230)	0.0534*** (0.00645)	0.0111*** (0.00280)	0.145*** (0.0314)	0.201*** (0.0366)	0.299*** (0.0375)	0.621*** (0.100)
<b>Constant</b>	1.168*** (0.0161)	2.736*** (0.0608)	0.846*** (0.0152)	0.245*** (0.00492)	2.656*** (0.0537)	3.554*** (0.0538)	4.461*** (0.0585)	5.856*** (0.165)
<b>Observations</b>	2,585	2,585	2,585	2,585	2,585	2,585	2,585	2,585
<b>R2</b>	0.366	0.118	0.200	0.242	0.446	0.362	0.418	0.146
<b>Number of provinces</b>	50	50	50	50	50	50	50	50

## 7 Appendix

Table A.1 contains some descriptive statistics of the variables included in the regression models.

As for the robustness checks, we have first run the models explained in sections 4 and 5 when we exclude the observations of Madrid and Barcelona (see Table A.2). As it can be observed, the results are consistent with those found in section 5.

In order to further explore the potential differential effects implied by "strong" (in the sense of higher number of lawyers per capita) and "weak" lawyering markets in Spain (see Figure 6), we have interacted the number of lawyers per capita (lawyers pc) with the reforms in the model below. The results, shown in Table A.3, are again consistent with those found in section 5.

$$\begin{aligned} Litigation_{j,p,t} = & \alpha_j + \beta_1 Reform\ 52/2002_{jt} + \beta_2 Reform\ 52/2002_{jt} * Lawyerspc_{jt} \\ & + \sum_{k=1}^k \delta_k Control_{jt}^k + \phi_1 Q2_t + \phi_2 Q3_t + \phi_3 Q4_t + \epsilon_{jpt} \end{aligned}$$

The interaction between the reform and the number of lawyers per capita smooths the effect of the reform on the congestion of ordinary cases. This fact implies that almost the entire effect of the reform was generated by the variability in the number of lawyers. Before 2002, an increase in the number of lawyers affected positively the congestion in ordinary cases. As a consequence of the reform, the congestion got reduced because the impact of the number of lawyers in the dependent variable turns negative. The "safe haven" effect explained in section 5.1 could explain this observation.

Table A.4. includes the estimation of the congestion rate for the total number of cases (verbal, payment, ordinary and exchange). Results seem to confirm what was previously mentioned: in general terms, the reform of 2012 has a significant average impact reducing the congestion rate in the civil jurisdiction.

**Table A.1. Descriptive statistics**

Variable	Obs	Mean	Std.Dev.	Min	Max
Verbal (New cases)	2650	1,180	0,354	0,3088	2,7083
Payment (New cases)	2650	2,599	1,390	0,3371	8,5120
Ordinary (New cases)	2650	0,786	0,253	0,2674	2,5608
Exchange (New cases)	2650	0,206	0,148	0	1,3858
Congestion rate (Verbal judgements)	3000	3,272	2,024	1,0509	36,1667
Congestion rate (Payment judgements)	2999	3,773	2,403	1,2347	45,1053
Congestion rate (Ordinary judgements)	2999	6,314	11,253	2,2024	379
Congestion rate (Exchange judgements)	2995	6,632	5,537	1,2436	119
Reform 52/2002	3200	0,813	0,390	0	1
Reform 10/2012	3200	0,203	0,402	0	1
Reform 1/2015	3200	0,0625	0,2421	0	1
GDP per capita	2250	20,013	4,605	10,6417	44,7420
Lawyers per capita	2650	0,002	0,001	0,0003	0,0168
Non-performing loan ratio	3000	0,087	0,124	0,0027	0,6294
Number corporations per cápita	2650	0,066	0,008	0,0359	0,0925
Unemployment rate	2550	0,169	0,085	0,0248	0,4323
Manufacturing (share of active population)	2550	16,288	6,271	3,1	36,9
Construction (share of active population)	2550	10,950	3,617	3,3	23,9
Services (share of active population)	2550	65,127	8,135	42,9	88,9

**Table A.2. Effects on congestion when Madrid and Barcelona are excluded**

VARIABLES	PERIOD: 2000-2012				PERIOD: 2003-2013				
	Verbal	Payment	Ordinary	Exchange	Mercantile	Verbal	Payment	Ordinary	Exchange
<b>Reform 52/2002</b>	0.0103 (0.0619)	-0.0126 (0.0791)	-0.365*** (0.109)	-0.320 (0.330)					
<b>Reform 10/2012</b>					0.243 (0.561)	-0.287*** (0.0818)	-0.495*** (0.0826)	0.0788 (0.143)	-0.635** (0.257)
<b>Non-performing loan ratio</b>	0.0500 (0.553)	-1.045 (0.763)	-0.741 (0.724)	-0.339 (1.838)	-9.113 (8.100)	-0.334 (0.570)	-0.924 (0.658)	-1.959** (0.759)	-1.031 (1.403)
<b>Lawyers per capita</b>	-17.89** (8.258)	2.969 (14.98)	-24.68 (15.49)	-10.40 (32.98)	274.9*** (46.07)	-19.14* (9.531)	-0.0265 (14.38)	-26.99* (13.91)	-24.04 (28.44)
<b>Number corporations per cápita</b>	28.17*** (10.12)	34.79* (17.60)	67.78*** (21.24)	28.29 (32.05)	-49.52 (66.17)	33.84*** (9.946)	43.84* (24.64)	97.71*** (21.68)	75.77* (41.71)
<b>GDP per capita</b>	-0.00399 (0.0134)	-0.0351 (0.0228)	0.00542 (0.0262)	0.0622 (0.0500)					
<b>Unemployment rate</b>					24.34 (24.02)	2.429*** (0.862)	0.624 (1.261)	4.067*** (1.508)	0.791 (2.339)
<b>Manufacturing</b>	-0.0164 (0.0191)	-0.0285 (0.0181)	-0.0265 (0.0271)	-0.0282 (0.0487)	0.165 (0.167)	-0.0153 (0.0164)	-0.00640 (0.0195)	-0.0289 (0.0241)	-0.0120 (0.0496)
<b>Construction</b>	-0.0343 (0.0216)	-0.0233 (0.0259)	-0.0953*** (0.0315)	-0.00476 (0.0403)	0.0915 (0.253)	-0.0156 (0.0219)	-0.0139 (0.0290)	-0.0720** (0.0284)	-0.0162 (0.0429)
<b>Services</b>	0.0324** (0.0124)	-0.0398*** (0.0146)	0.0316** (0.0142)	-0.0708* (0.0402)	-0.195* (0.107)	0.0219* (0.0117)	-0.0330* (0.0175)	0.0180 (0.0158)	-0.0542 (0.0470)
<b>Second quarter</b>	-0.128*** (0.0209)	-0.245*** (0.0366)	-0.120*** (0.0335)	-0.185** (0.0849)	-1.474 (1.303)	-0.110*** (0.0197)	-0.168*** (0.0357)	-0.0804** (0.0384)	-0.311*** (0.0991)
<b>Third quarter</b>	1.118*** (0.0479)	0.788*** (0.0594)	1.745*** (0.0737)	1.969*** (0.191)	-0.994 (1.602)	1.228*** (0.0515)	0.806*** (0.0593)	1.940*** (0.0786)	1.809*** (0.152)
<b>Fourth quarter</b>	0.100*** (0.0315)	0.142*** (0.0419)	0.138*** (0.0436)	0.533*** (0.133)	-1.622 (1.454)	0.175*** (0.0366)	0.261*** (0.0462)	0.273*** (0.0495)	0.517*** (0.132)
<b>Constant</b>	-0.435 (1.278)	5.229*** (1.443)	-0.0721 (1.559)	7.810** (3.109)	14.57* (7.680)	-0.807 (1.193)	2.828 (1.700)	-2.281 (1.470)	4.435 (4.090)
<b>Observations</b>	2,067	2,067	2,067	2,067	1,521	1,920	1,920	1,920	1,920
<b>R2</b>	0.524	0.226	0.499	0.137	0.014	0.537	0.307	0.537	0.172
<b>Number of provinces</b>	48	48	48	48	48	48	48	48	48



**Table A.3. Further analysis of local lawyering markets**

VARIABLES	Congestion rate			
	Verbal	Payment	Ordinary	Exchange
<b>Reform 52/2002</b>	0.377 (0.274)	0.196 (0.610)	0.744 (0.467)	-0.333 (1.582)
<b>Lawyers per capita</b>	188.1 (149.3)	108.9 (355.1)	604.4** (260.6)	-26.40 (861.2)
<b>Lawyers per capita*Reform 52/2002</b>	-206.8 (149.4)	-106.8 (355.3)	-631.2** (262.1)	15.55 (863.3)
<b>Non-performing loan ratio</b>	0.0594 (0.552)	-0.975 (0.769)	-0.721 (0.729)	-0.308 (1.834)
<b>Number corporations per cápita</b>	27.06*** (9.651)	34.39* (17.42)	63.98*** (20.26)	29.03 (31.71)
<b>GDP per capita</b>	-0.00476 (0.0129)	-0.0375 (0.0237)	0.00348 (0.0251)	0.0617 (0.0491)
<b>Manufacturing</b>	-0.0151 (0.0187)	-0.0206 (0.0204)	-0.0272 (0.0260)	-0.0224 (0.0472)
<b>Construction</b>	-0.0336 (0.0214)	-0.0206 (0.0261)	-0.0941*** (0.0310)	-0.00266 (0.0397)
<b>Services</b>	0.0315** (0.0122)	-0.0407*** (0.0148)	0.0294** (0.0138)	-0.0719* (0.0384)
<b>Second quarter</b>	-0.123*** (0.0204)	-0.233*** (0.0362)	-0.112*** (0.0323)	-0.180** (0.0822)
<b>Third quarter</b>	1.128*** (0.0468)	0.804*** (0.0587)	1.767*** (0.0730)	1.990*** (0.183)
<b>Fourth quarter</b>	0.107*** (0.0307)	0.152*** (0.0411)	0.151*** (0.0427)	0.550*** (0.128)
<b>Constant</b>	-0.711 (1.303)	5.005*** (1.400)	-0.792 (1.581)	7.788** (3.407)
<b>Observations</b>	2,145	2,145	2,145	2,145
<b>R2</b>	0.530	0.235	0.506	0.144
<b>Number of provinces</b>	50	50	50	50



**Table A.4. Effects of the fees on congestion when the total number of cases is considered**

VARIABLES	Congestion rate (total cases)		
Reform 52/2002	-0.0464 (0.124)		
Reform 10/2012		-0.411*** (0.130)	
Reform 1/2015			-0.0684 (0.0919)
Non-performing loan ratio	0.931 (0.820)	0.776 (0.663)	
Lawyers per cápita		-3.005 (15.31)	54.04** (26.88)
Number corporations per cápita	26.84* (15.87)	78.79*** (22.32)	
Unemployment rate		2.724 (1.706)	
Manufacturing	0.0385 (0.0328)	-0.00815 (0.0269)	
Construction	-0.0194 (0.0477)	-0.0341 (0.0405)	
Services	0.0590** (0.0223)	0.0138 (0.0196)	
Second quarter		-0.0853* (0.0470)	-0.0392 (0.0412)
Third quarter		1.806*** (0.0896)	1.819*** (0.0844)
Fourth quarter		0.483*** (0.0671)	0.444*** (0.0625)
Constant	0.136 (2.073)	0.162 (1.948)	6.139*** (0.0698)
Observations	2,145	2,150	2,487
R2	0.066	0.355	0.302
Number of provinces	50	50	50

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