Too many lawyers? Litigation in Italian civil courts*

Amanda Carmignani†and Silvia Giacomelli‡

July 2009

Abstract

In this paper we investigate the relationship between the number of lawyers and civil litigation across Italian provinces over the period 2000-2005. We first document the existence of a positive correlation between the number of lawyers and litigation. We then employ a 2SLS approach to verify the existence of a causal effect. We use as an exogenous source of variation for the number of lawyers the differences among provinces in the proximity to a law school in 1975. Our results show that the number of lawyers has a positive effect on litigation and that the magnitude of this effect is large.

JEL classification: K41, J44, L84

Keywords: civil justice, litigation, market for lawyers

1 Introduction

The Italian civil justice system is characterized by a high level of litigiousness compared to other European countries. According to CEPEJ (2008), the litigation rate (i.e. yearly ratio of new proceedings to population) in Italy is 3.5 times the one in Germany and twice the rates in France and Spain. Another distinctive feature of the Italian legal system is the higher number of lawyers than countries with comparable economies: among the major European countries, Italy has the highest incidence of lawyers on population (CEPEJ, 2008). Indeed, within-country data suggest that in Italy there is a positive correlation between litigation rates and the number of lawyers over population. The purpose of this paper is to empirically investigate the existence of a causal effect of the number of lawyers on litigiousness in Italy.

The idea that a high number of lawyers may contribute to excessive litigation has been maintained in Italy for a very long time, at least since 1921 when Pietro Calamandrei, an eminent lawyer and politician, wrote an article titled "Too Many Lawyers!". In the past few years, following a huge increase in the number of lawyers and the enduring crisis of the civil justice system[1], this issue has become again vividly debated. Recently the President of the Court of Appeal of Rome stated in a public speech that:

> "The huge number of lawyers - Rome has as many lawyers as the whole France - might unintentionally determine the risk of an increase in the recourse to justice by citizens and, given the lack of resources, it might affect the length of trials."[2]

Why a high number of lawyers should increase litigation? Considering the number of lawyers as a proxy for the degree of competition in the market for legal services, the literature identifies two channels through which this may affect litigation. The first channel is the pricing effect: more competition may result in lower costs of legal services. Since this reduces the overall litigation costs for individuals, *ceteris paribus*, it is more likely that individuals decide to bring a dispute before a court. A second, and more specific, channel derives from the nature of *credence goods* of legal services (Darby and Karny, 1973).[3] Credence goods (or services) are those for which the seller is also an expert who "knows more about the type of good or service the consumer needs than the consumer himself[4]". In such markets

---

[1] According to the Doing Business report, the duration of a payment dispute in Italy is 1,210 days compared to an average duration of 463 days in OECD countries (World Bank, 2008).

[2] Claudio Fancelli, "Relazione per l'inaugurazione dell'anno giudiziario 2008", Rome, 26 January 2008. Translated by the authors.

[3] Besides legal services, typical credence goods are medical services, financial advice services and the various type of repair services.

[4] Dulleck and Kerschbamer (2006).

sellers may have the incentive to exploit their informational advantage over consumers defrauding them, for instance inducing them to pay for goods or services they do not need (this phenomenon is known as *overtreatment*).[5] While from a theoretical point of view, overtreatment has been mainly analyzed within a monopolistic setting[6], the role of competition in determining overtreatment has received wide attention in health economics. A huge empirical literature has been developed on the idea that physicians may respond to a fall in their incomes due to an increase in the number of suppliers (at a given level of demand) exerting effort in inducing demand for their services (Evans, 1981).[7]

In the market for legal services overtreatment may take various forms. For instance, lawyers may induce their clients to bring a case to court even when this is not in their best interest, because of the low value of the claim (compared to the costs) or because the case has a low probability of success. Moreover, lawyers may provide a more sophisticated treatment of the case than the one needed (writing more complex acts and memorials, requesting hearings of unneeded witnesses). Incentives to demand inducement may also depend on the method of compensation for lawyers. Though the literature on lawyers' compensation schemes does not provide unambiguous answers, some studies show that when lawyers have spare capacity workload-based methods provide stronger incentives to demand inducement than methods that link compensation to results (Emons, 2000; Polinsky and Rubinfeld, 2006). The former is the method employed in Italy where compensation depends on the number and type of actions lawyers undertake for their clients (acts and memorials submitted, hearings attended, etc.) and where, until very recently, contingent fees were not allowed.

We conduct our analysis on the effect of the number of lawyers on litigation in Italy using data at the provincial level over the period 2000-2005. We start our analysis with OLS estimations in which we control for other potential determinants of litigation and for year and region-specific unobserved factors. Our estimates show a positive correlation between the number of lawyers and litigation. The magnitude of the effect is relevant: moving from the province corresponding to the 25th percentile of the distribution of lawyers over population to the province corresponding to the 75th percentile of the distribution, the litigation rate increases by 14 per cent.

In order to verify whether this result is determined by a causal relation from lawyers to litigation, we employ a Two-Stage-Least-Square (2SLS) ap-

---

[5]Other types of frauds that may rise in markets for credence goods are undertreatment (a consumer requires more complex treatments or more sophisticated goods than the ones provided by the expert) and overcharging (a consumer is charged for goods or services he did not receive).

[6]For a thorough survey of the literature, see Dulleck and Kerschbamer (2006).

[7]Overall, this literature provides evidence supporting demand inducement behavior by physicians in response to competition; for a survey, see McGuire (2000).

proach. As an exogenous source of variation for the number of lawyers over population we exploit the differences among provinces in the proximity to a law school in 1975. The use of this instrument relies on the fact that the proximity to a law school reduces the cost of becoming a lawyer, thus it may promote the development of the legal profession in a province beyond what may be determined by the demand for legal services in that province. Our results confirm that the number of lawyers has a positive effect on litigation when we account for the endogeneity of this variable.

This paper contributes to the relatively scarce literature on the effect of the number of lawyers on litigation and improves it directly addressing the endogeneity issues that arise in the analysis. The number of lawyers is generally included as a control variable in empirical studies on the determinants of litigation with ambiguous results. However, this literature largely ignores endogeneity issue. A positive and significant association between the number of lawyers and litigation is found in Hansenn (1999) on US courts data, in Ginsburg and Hoetker (2006) with reference to litigation in Japan and in Felli, Tria, Londono-Bedoya and Solferino (2007) on Italian data. Posner (1997), Yates, Creel Davis and Glick (2001), Yates, Tankersley and Brace (2005) do not find any significant relation on different US datasets; the same result is obtained by Clemenz and Gugler (2000) on Austrian data.

The paper is organized as follows. Section 2 presents data on litigation and lawyers in Italy and discusses relevant institutional features. Section 3 describes the data and the empirical specification. Section 4 and 5 present the results and discuss their robustness. Section 6 concludes.

2 Litigation and lawyers in Italy: institutional features and measurement issues

In the Italian judicial system *Tribunali* are the main courts, they administer the more complex and substantial first-instance civil cases. For this reason we choose as our measure for litigation the number of first-instance ordinary civil proceedings (*procedimenti di cognizione ordinaria*) filed every year in *Tribunali*, scaled by population (litigation rate). Our measure mainly includes disputes on contract, property, business organization and tort.[8] It does not include small value claims.[9]

Entry in the market for lawyers is regulated by national laws. The professional requirements to become lawyers are: a university degree in law, two years of professional practice, passing a professional exam. The professional

---

[8] Our data do not include litigation in some matters which are dealt with in *Tribunali*, but are generally assigned to special divisions (such as labor, social security, family and bankruptcy).

[9] Small value claims (below 2,852 Euros, or below 15,493 Euros for vehicles related accidents) are dealt with in Justice of Peace courts by non-professional judges.

exam is administered by the lawyers' professional association (*ordine degli avvocati*) through its local branches, though the process is supervised by the Court of Appeals. Registration with the professional association (to a local branch) is compulsory and gives the lawyer the exclusive right of legal representation. Lawyers may represents clients in any Italian court, irrespectively of the branch of affiliation to the professional association. Since comprehensive data on registered lawyers are not available, we use the number of enrollments in the pension scheme managed by the professional association as a measure for the number of lawyers. For a lawyer to be enrolled in the scheme her annual earnings must exceed a certain threshold. Thus, our measure underestimates the number of qualified lawyers as it results from the registers of the lawyers' professional association, but it is a more accurate measure of the number of actual practicing lawyers.

Both data on civil proceedings and lawyers are collected at the level of *Tribunali* (within the country there are 165 *Tribunali*) and then aggregated at the level of the 103 Italian provinces.[10]

The average litigation rate in our sample is 793 cases filed per 100,000 inhabitants in a year (over the period 2000-2005). Litigation rates vary widely across provinces (Fig. 1), on average they are higher in Central and Southern provinces than in Northern ones (the figures are respectively 872 and 696 cases per 100,000 inhabitants). As Fig. 2 shows, litigation is relatively stable over the period we consider: the average litigation rate has grown by 3 per cent from 2000 to 2005.

The provinces with the highest incidence of lawyers on population are the ones where the biggest cities are located (namely, Rome and Milan); as shown in Fig. 1, on average there are more lawyers in the Southern provinces than in the rest of Italy (the number of lawyers per 100,000 inhabitants is 176 in the South and 142 in the Centre and North of Italy). The number of lawyers has grown considerably over the sample period: between 2000 and 2005 the number of lawyers per 100,000 inhabitants increased by 33 per cent (Fig. 2).

Litigation and lawyers do not appear to be strongly correlated over time (Fig. 2), while there seems to be a positive association across provinces (Fig. 3). However, these correlations may be due to the fact that both variables respond to other factors. To take this into account we perform multivariate analysis.

3   Empirical specification and data description

To perform our analysis we assembled a dataset that matches information on judicial proceedings filed in courts and on the number of lawyers for

---

[10]Provinces are the administrative territorial units which correspond to level 3 in the Eurostat NTUS classification; they are comparable in size to U.S. counties.

Figure 1: Number of new cases filed and number of lawyers per 100,000 inhabitants (average 2000-05)
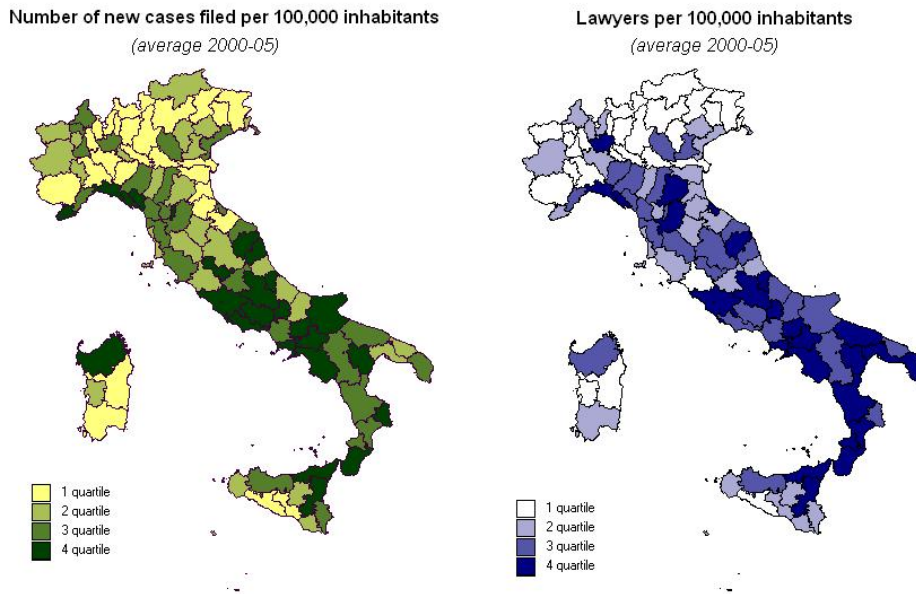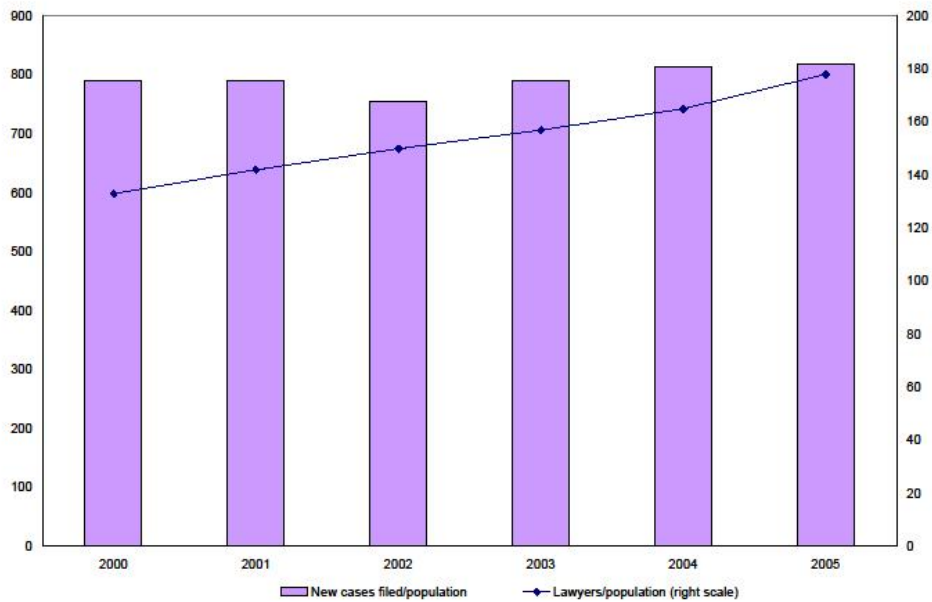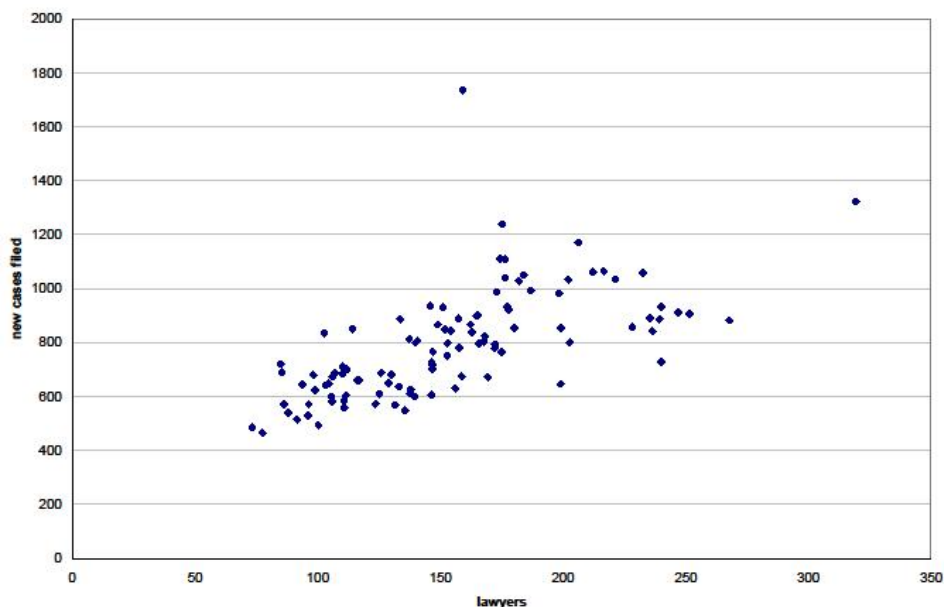

Figure 2: New cases filed and lawyers per 100,000 inhabitants: correlation over time

the 103 Italian provinces over the years 2000-2005. The choice of the time

6

Figure 3: New cases filed and lawyers per 100,000 inhabitants: correlation across provinces

period is mainly dictated by the availability of homogeneous data on judicial proceedings.[11]

We employ the following empirical specification:

$$litigation_{i,t} = \alpha_0 + \alpha_1 lawyers_{i,t} + \alpha_2 X_{i,t} + \epsilon_{i,t} \qquad (1)$$

where $litigation_{i,t}$ is the number of first-instance cases filed in province i during year t over population; $lawyers_{i,t}$ is the number of lawyers over population, $X_{i,t}$ is a set of control variables and $\epsilon_{i,t}$ is an error term.

The set of control variables includes economic and social factors that are likely to influence litigation. Economic variables comprise the value added per capita (gdp) and the annual growth rate of value added per capita (gdp_growth). The first variable intends to capture the size and development of the local economy, however its influence on litigation is ambiguous: on the one hand the larger is the economy the higher the number of transactions, hence the potential for disputes (Posner, 1997; Hansenn, 1999; Clemenz and Gugler, 2000; Ginsburg and Hoetker, 2006; Murrell, 2001); on the other hand, more economic development might reduce litigation. The growth rate of value added per capita is a proxy for the economic cycle. It should be negatively associated with litigation, as when the economy slows down,

[11]A major organizational reform of the judicial system took place in 1999 making it difficult the construction of a homogeneous dataset that includes also pre-reform data.

7

obligations may become more difficult to be met for parties; thus it is more likely that disputes arise (Clemenz and Gugler, 2000; Ginsburg and Hoetker, 2006).

Turning to social factors, we include a measure of the degree of urbanization (*urban*) as a proxy for social complexity. This might influence litigation in two ways. Firstly, in more complex society the number of social interactions are greater, thus the potential for conflicts. Secondly, in complex society it is more likely that interactions occur between individuals who are not well acquainted or do not belong to close-knit communities, in this circumstances disputes are more likely to be brought to courts rather than solved through informal mechanisms (Posner, 1997; Hansenn, 1999; Yates et al., 2001; Ginsburg and Hoetker, 2006; Yates et al., 2005). The amount of litigation may also be affected by the level of trust and the attitude to cooperative behavior in a local community (social capital): a higher level of social capital (*social capital*) may decrease litigation both reducing the propensity for parties to breach contracts in the first place, and favoring the resolution of disputes outside courts once they occur. Following Putnam (1993), we use as a proxy for the level of social capital the number of non-profit organizations per capita. To take into account possible correlations between civil disputes and criminal activity, we add a measure of the local incidence of crime (*crime*).

Finally, we include a measure of the length of trials as a proxy for the efficiency of local courts (*length*). The effect of the length of trials on litigation is ambiguous. On the one hand, long trials reduces the value of the potential judgment for plaintiffs discouraging them from bringing suits (Priest, 1989). On the other hand, long trials may increase the number of potential disputes as they give incentives to parties to breach contracts in the view of postponing payments (Miller, 1989; Marchesi, 2003). Our measure is the average disposal time for cases filed in *Tribunali* over the period 1995-1998. We use lagged values to reduce the potential endogeneity of this variable.

Detailed definitions of the variables and sources are reported in Table 1, Table 2 shows descriptive statistics and Table 3 reports the correlation matrix among all the variables.

4   Baseline results

Table 4 presents the results of OLS estimates on equation (1), all regressions include year and regional fixed-effects.[12] As we will discuss in more detail in the next section, the choice of using regional fixed-effect instead of

---

[12]Regions are the administrative territorial units which correspond to level 2 in the Eurostat NTUS classification. There are 20 regions in Italy; we aggregated two regions for a total of 19 dummies.

provincial fixed-effect estimations is mainly dictated by comparability reason: as the instrumental variable we use to address the issue of causality is time invariant, we are unable to perform 2SLS estimates with province fixed-effects that are directly comparable with OLS estimates.

The results show that the number of lawyers over population is positively correlated with litigation rates, the coefficient is statistically significant at the 1 per cent level in any of the specifications (Tab. 4). Among the controls, the coefficients of the economic variable are non significant, while those of the social variables are significant and have the expected sign. The length of civil proceedings appears to favor the recourse to courts.

According to our estimates the effect of the number of lawyers on litigation is relevant. Going from the province corresponding to the 25th percentile of the distribution of lawyers over population to the province corresponding to the 75th percentile, litigation rate increases by 14 per cent (the number of cases increases from 735 per 100,000 inhabitants to 840) (Tab. 4, column 3).

5 Causality

5.1 Instrument

In this section we address the issue of potential reverse causality between lawyers and litigation. As discussed earlier, a large number of lawyers (i.e. more competition in the market for lawyers) might favor litigation either through price-effect or through inducement demand effect. However, it might also be the case that a high level of litigation (i.e. large demand for legal services) determines the presence of a large number of lawyers. In equilibrium both variables are determined simultaneously. This may cause an upward bias in the OLS estimates.

In order to take this issue into account and identify a causal effect from lawyers to litigation, we employ a 2SLS approach using as an exogenous source of variation for the number of lawyers the differences among provinces in the proximity to a law school. The rationale behind the use of this instrument is the idea that the choice to become a lawyer is influenced by educational costs (i.e. the costs of attending a law school). In Italy, where universities are generally public, a relevant stake of these costs consists of living costs. The magnitude of these costs depends, among others, on the distance between a student's hometown and the closest law school: the longer the distance the higher the living costs.[13]

According to this, we define our instrument as a variable (*lsproximity75*) which is equal to zero in the provinces with a law school and equal to the

---

[13]Our approach resembles Card (1989) that uses variation in college proximity as an instrument for educational choices.

9

distance (in kilometres) between the province and the closest province with a law school elsewhere.[14] This instrument should also capture the presence of a local tradition for legal studies. This might promote the development of the profession at a local level beyond what might be determined by the demand for legal services. According to our definition, we expect a negative correlation on first-stage regression of *lawyers* on the instrument.

However, the localization of law schools in a certain area could be affected by the level of demand for legal services in the same area; in such a case our instrumental variable would be correlated with the error term in equation (1). To account for this issue and ensure the exogeneity of the instrument, we construct it with reference to a period that precedes our sample period. More in detail, we consider the localization of law schools in 1975. The choice of the reference year is aimed at ensuring the exogeneity of the instrument while maintaining at the same time the connection between students in law in the past and lawyers in our sample period. Indeed, the Italian university system has been characterized by substantial persistence until the early nineties as a result of a centralized organization that required legislative measures to open new universities (Bratti, Checchi and de Blasio, 2008). Persistence has also characterized the presence of law schools by province: the number of provinces with law schools has passed from 20 to 28 over the period 1875-1986. Thus, the choice of a different reference year before the nineties would not produce substantial changes in the definition of our instrumental variable (see section 5.3).

Fig. 4 shows the distribution of the instrument across Italian provinces. In about 1/4 of the provinces there is a law school; another quarter of the provinces are at a distance from a province with a law school such that daily commuting for students attending the school is feasible (we assume this distance is less than 60 kms); half of the provinces are at a distance such that students do not have the option of living at home while attending the school.

Our instrumental variable refers to a period that precedes our sample period; however, if litigation is persistent over time this may not be enough to ensure the exogeneity of the instrument. To check whether this is the case, we consider the evolution of litigation rates across judicial districts over time. Tab. 5 reports the ranking of judicial districts by litigation rates for different time periods from 1951 to 2000, the districts are ranked from the least to the most litigious ones.[15] Data show that the ranking varies over time; this may be interpreted as evidence, though rough, of the fact that litigation is not persistent and that it is reasonable to assume that the localization choices of law schools in the past are not correlated with current

---

[14]We consider the distance between provinces' chief towns.

[15]Judicial districts (*distretti di corte d'appello*) are the smallest territorial unit in the organization of the Italian judicial system for which data are available before 1995; the number of districts has grown from 26 to 29 over the period 1951-2000.

Figure 4: Law school proximity in 1975

levels of litigation.

5.2   Results

The results of 2SLS estimates are reported in Table 6 (columns 1-3). As in the OLS regressions, we estimate a model with year fixed-effect and regional dummies. Our instrument has the expected sign on first stage regressions and the F-statistic of excluded instruments is generally well above the levels that indicate weakness of the instrument. The results confirm the previous findings: the number of lawyers has a positive effect on litigation rates, the coefficients are statistically significant.

In comparison with OLS estimates, the 2SLS estimates produce slightly larger coefficients. As a result, the magnitude of the effect of *lawyers* on *litigation* is greater: moving from the 25th to the 75th percentile in the provincial distribution of lawyers over population, litigation rate increases by 16 per cent (Tab. 6, column 3).

This result may be explained by the existence of an attenuation bias in the OLS estimates due to measurement errors in the lawyers population that prevails on the upward bias due to simultaneity. Indeed our measure may under-report the number of lawyers for two reasons. First of all, as already

mentioned, we do not measure the number of registered lawyers but only the number of lawyers whose earnings are above a certain threshold. Secondly, we measure the number of lawyers with reference to local affiliations to the professional organization, but lawyers may carry out their professional activity everywhere in the country irrespectively of the place of affiliation. However, it is reasonable to maintain that in both cases the under-reporting is not so relevant. In the first case, the earning threshold is very low; in the second case, it is widely held among practitioners that clients tend to choose local lawyers to represent them, both to save on costs and to exploit the lawyers' knowledge of the local *legal culture* (i.e. social norms and work habits of judges and lawyers in local courts).

5.3 Robustness

Our results may be subject to two main caveats. Firstly, since our instrument is time invariant we are unable to include in the regressions province-fixed effects to control for unobserved factors. Thus, we are unable to fully rule out the possibility that the correlation of our instrument with the number of lawyers depends on the fact that both variables respond to omitted factors. In order to reduce this concern, we include in our basic specification additional controls, aimed at capturing features of each province that are likely to be correlated with the presence of a law school, such as province size or administrative role. More in detail, we control for the size of the province, as measured by living population (*province size*), and for the presence in the province of the regional chief town (*chief town*). The results of the regressions, reported in Table 6 (columns 4 and 5), show that the inclusion of any of the two variables in the model does not alter our findings.

Secondly, in building our instrument we made discretionary choices regarding the reference year for the localization of law schools. In order to check whether the results obtained depend on the year chosen, we define the instrumental variable using 1986 as a benchmark year (*lsproximity86*). As expected due to the institutional features of the Italian university system, this instrument only slightly differs from *lsproximity75*: the number of provinces with a law school increases by one (as a result of the opening of two new schools and the closing of one); both the mean value and the median value of the distance decrease by 5 kms. Our main results still hold (Table 7, column 1).[16]

Finally, as further robustness check we use another definition of the instrument, directly related to the presence of the law school in the province in the past. We refer to the benchmark years already used, namely 1975 and

---

[16]We checked the robustness of our results by considering also a reference year before 1975. We focused on 1968 when the number of provinces with a law school was lower by two compared to 1975. The results (available upon request) confirm the causal effect of the number of lawyers on litigation.

1986, and define the instruments as dummy variables equal to 1 if the law school was located in the province in the past (instrument: (*ls75*) or (*ls86*)). On the basis of this definition, we expect a positive correlation on first-stage regressions of the number of lawyers on the instruments. The results of our estimates, reported in Table 7 (columns 2 and 3), confirm the causal effect of the number of lawyers on litigation.[17]

6 Conclusions

In this paper, we investigated the relationship between the number of lawyers and civil litigation across Italian provinces over the years 2000-2005. Our results provide evidence of a causal impact of the number of lawyers on litigation.

If we interpret the number of lawyers as a proxy for the intensity of competition in the market for legal services, our findings may be attributed to two different lawyers' behaviors in response to increasing competition: lawyers may reduce the prices of their services making more convenient for clients to bring cases before courts or they may increase their efforts in inducing demand for their services exploiting the informational advantage over clients. Unfortunately, we are unable to distinguish between the two possibilities. However, until 2006 a regime of minimum prices for lawyers was in place. This may have reduced the scope for lawyers to adjust prices in response to competition and favored inducing demand behavior.

A relevant policy implication of our results is that entry in the Italian market for lawyers should be made more stringent to reduce litigation. Moreover, the revision of the rules on lawyer fees aimed at ensuring an effective link between compensation and results should be considered.

References

Bratti, M., Checchi, D. and de Blasio, G. (2008). Does the expansion of higher education increase the equality of educational opportunities? evidence from italy, *Labour* **22**: 53–88.

Card, D. (1989). Using geographic variation in college proximity to estimate the return to schooling, *Working Paper No. 4483*, NBER Working paper n. 4483.

CEPEJ (2008). *European Judicial Systems*, Council of Europe, Strasbourg.

Clemenz, G. and Gugler, K. (2000). Macroeconomic development and civil litigation, *European Journal of Law and Economics* **9**: 215–230.

---

[17]Results hold using as reference year any year over the period 1875-1986.

Darby, M. and Karny, E. (1973). Free competition and the optimal amount of fraud, *Journal of Law and Economics* **16**: 67–88.

Dulleck, U. and Kerschbamer, R. (2006). On doctors, mechanics, and computer specialists: The economics of credence goods, *Journal of Economic Literature* **44**: 4–42.

Emons, W. (2000). Expertise, contingent fees, and insufficient attorney effort, *International Review of Law and Economics* **20**: 21–33.

Evans, R. (1981). *Supplier Induced Demand. Some Empirical Evidence and Implications*, in M. Perlman (ed.), The Economics of Health and Medical Care, London: Macmillan, pp. 162–173.

Felli, L., Tria, G., Londono-Bedoya, D. and Solferino, N. (2007). *The "Demand for Justice" in Italy: Civil Litigation and the Judicial System*, Padovano F. and Ricciuti R. (eds.), Italian Institutional Reforms. A Public Choice Perspective, New York: Springer, pp. 162–173.

Ginsburg, T. and Hoetker, G. (2006). The unreluctant litigant? an empirical analysis of japans turn to litigation, *Journal of Legal Studies* **35**: 31–59.

Hansenn, F. (1999). The effects of judicial institutions on uncertainty and the rate of litigation: The election versus appointment of state judges, *Journal of Legal Studies* **28**: 205–232.

Marchesi, D. (2003). *Litiganti, avvocati e magistrati: diritto ed economia del processo civile*, Il Mulino, Bologna.

McGuire, T. (2000). *Physician Agency*, Culyer, A.J. and Newhouse J.P. (eds.), Handbook of Health Economics, Amsterdam: Elsevier Science, pp. 162–173.

Miller, G. (1989). Some thoughts on the equilibrium hypothesis, *Boston University Law Review* **69**: 561–568.

Murrell, P. (2001). Demand and supply in romanian commercial courts: Generating information for institutional reform. manuscript.

Polinsky, A. and Rubinfeld, D. (2006). Aligning the interests of lawyers and clients, *American Law and Economics Review* **5**: 165–188.

Posner, R. (1997). Explaining the variance in the number of tort suits across u.s. states and between the united states and england, *Journal of Legal Studies* **26**: 477–489.

Priest, G. (1989). Private litigants and the court congestion problem, *Boston University Law Review* **69**: 527–559.

Putnam, R. (1993). *Making Democracy Work: Civic Traditions in Modern Italy*, Princeton University Press, Princeton NJ.

World Bank (2008). *Doing Business 2008*, World Bank, Washington.

Yates, J., Creel Davis, B. and Glick, H. (2001). The politics of torts: Explaining litigation rates in the american states, *State Politics and Policy Quarterly* pp. 127–143.

Yates, J., Tankersley, H. and Brace, P. (2005). Do institutions really matter? assessing the impact of state judicial structures on citizen litigiousness. manuscript.

Table 1: Variable definition and source

Variable	Definition
Litigation rate	Number of first-instance ordinary civil proceedings filed every year in Tribunali per 100,000 inhabitants (source: Ministry of Justice and Istat)
Number of lawyers	Number of lawyers enrolled in the pension scheme managed by the lawyers professional association per 100,000 inhabitants (source: Cassa Nazionale Forense)
GDP	Value added per capita by province and year in thousands of Euros (source: Istat)
GDP_growth	Yearly growth rate of provincial value added per capita (source: Istat)
Length	Time elapsed from filing to decision of a case in Tribunali in days by province, average over the years 1995-1998 (source: Istat)
Social Capital	Number of non-profit organizations per 100,000 inhabitants in 1999 by province (source: Istat)
Urban	Ratio of the population living in the main city of the province to the population living outside it by province and year (source: Istat)
Crime	Number of crimes reported by the police per by 100,000 inhabitants by province and year (source: Istat)
Province Size	Dummy variable which is equal to 1 if the population in the province is above 350,000 inhabitants and is equal to 0 otherwise (source: Istat)
Chief town	Dummy variable which is equal to 1 if the regional chief town is in the province and equal to 0 otherwise (source: Istat)
Instrumental variables	
Lsproximity75	Variable which is equal to 0 if there was a law school in the province in 1975 and equal to the distance between the province and the closest province with a law school elsewhere (source: Istat)
Ls75	Dummy variable which is equal to 1 if there was a law school in the province in 1975 and equal to 0 elsewhere (source: Istat)

Table 2: Descriptive statistics

variable	mean	median	std dev	I q	III q
litigation rate	793.451	764.287	221.452	636.201	910.272
lawyers	154.441	148.730	50.231	118.128	183.608
gdp	19,305.76	19,894.10	5036.55	14,515.40	23,228.94
gdp_growth	3.734	3.498	2.823	1.634	5.541
urban	47.516	28.971	74.911	20.845	47.957
crime	4,149.57	4,019.20	1571.6	3,126.80	4,840.50
length	1,283.56	1,249.12	239.8	1,124.88	1,456.85
social capital	35.686	32.100	15.609	23.500	45.000
chief town	0.194	0.000	0.396	0.000	0.000
province size	0.550	1.000	0.498	0.000	1.000
lsproximity75	61.214	60.000	52.605	0.000	95.000
ls75	0.262	0.000	0.440	0.000	1.000
observations	617				

Table 3: Correlation matrix

	litigation rate	lawyers	gdp	gdp growth	urban	crime	length	social capital	chief town	province size	lsproximity75	ls75
litigation rate	1.000											
lawyers	0.575 (0.000)	1.000										
gdp	-0.194 (0.000)	-0.120 (-0.0029)	1.000									
gdp growth	0.034 (0.4046)	-0.080 (0.0458)	-0.222 (0.000)	1.000								
urban	0.216 (0.000)	0.203 (0.000)	0.178 (0.000)	0.071 (0.078)	1.000							
crime	0.284 (0.000)	0.328 (0.000)	0.068 (0.0894)	0.047 (0.2421)	0.132 (0.001)	1.000						
length	0.235 (0.000)	0.274 (0.000)	-0.489 (0.000)	0.059 (0.1444)	-0.212 (0.000)	-0.085 (0.0346)	1.000					
social capital	0.062 (0.1238)	0.030 (0.4541)	0.486 (0.000)	-0.054 (0.1839)	0.453 (0.000)	0.119 (0.0029)	-0.338 (0.000)	1.000				
chief town	0.094 (0.0201)	0.356 (0.000)	0.141 (0.000)	-0.012 (0.7705)	0.303 (0.000)	0.180 (0.000)	-0.101 (0.0119)	0.161 (0.000)	1.000			
province size	-0.014 (0.7381)	0.264 (0.000)	0.099 (0.0141)	-0.060 (0.1367)	-0.122 (0.0023)	0.023 (0.5656)	0.002 (0.9666)	-0.150 (0.000)	0.2465 (0.000)	1.000		
lsproximity75	-0.160 (0.000)	-0.261 (0.000)	-0.270 (0.000)	0.074 (0.0676)	-0.252 (0.000)	-0.226 (0.000)	0.200 (0.000)	-0.304 (0.000)	-0.1678 (0.000)	-0.1781 (0.000)	1.000	
ls75	0.150 (0.000)	0.405 (0.000)	0.127 (0.0016)	-0.037 (0.3561)	0.259 (0.000)	0.207 (0.000)	-0.168 (0.000)	0.239 (0.000)	0.3771 (0.000)	0.3097 (0.000)	-0.6941 (0.000)	1.000

P-values in parentheses.

Table 4: Determinants of litigation

dependent variable: litigation rate	(1)	(2)	(3)
lawyers	2.103***	1.795***	1.601***
	(0.309)	(0.304)	(0.298)
gdp	-0.003	-0.007	0.001
	(0.007)	(0.008)	(0.005)
gdp_growth		-2,031	-2,638
		(3.009)	(2.880)
urban		0.370**	0.732***
		(0.149)	(0.193)
crime		0.015*	0.015**
		(0.008)	(0.007)
length			0.101*
			(0.055)
social capital			-4.943**
			(2.452)
year control	yes	yes	yes
region control	yes	yes	yes
Observations	617	617	617
R^2	0.469	0.487	0.519

Standard errors in parentheses. Standard errors are robust to heteroskedasticity and corrected for clustering on provinces. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table 5: Ranking of litigation by judicial district

judicial districts	1951-55	1956-60	1961-65	1966-70	1971-72	1990	2000
Turin	18	12	15	8	7	12	7
Milan	23	22	21	11	10	16	5
Brescia	7	5	8	3	5	5	2
Genova	20	21	20	15	12	21	19
Trento	16	11	9	5	6	2	1
Bolzano							3
Venice	2	4	6	2	2	7	4
Trieste	21	7	5	4	3	10	6
Bologna	15	7	7	8	8	8	
Florence	11	17	13	14	15	18	15
Perugia	4	8	4	10	16	15	9
Ancona	3	6	11	13	17	13	11
Rome	24	24	24	24	20	23	22
L'Aquila	9	3	3	6	9	14	18
Campobasso						17	12
Naples	22	23	23	23	22	22	29
Salerno						20	28
Bari	15	18	14	12	13	25	24
Lecce	17	14	16	16	18	19	20
Taranto							25
Potenza	6	10	12	19	19	6	23
Catanzaro	1	1	1	1	1	1	21
Reggio Calabria	12	16	18	22	21	26	26
Palermo	8	13	17	18	11	11	17
Messina	13	19	22	21	23	24	27
Caltanissetta	10	9	2	9	4	3	14
Catania	19	20	19	17	14	9	16
Cagliari	5	2	10	20	24	4	10
Sassari							13

Table 6: Causality

dependent variable: litigation rate	(1)	(2)	(3)	(4)	(5)
lawyers	2.305***	1.613*	1.828**	2.213**	2.528**
	(0.680)	(0.886)	(0.820)	(0.930)	(1.150)
gdp	-0.004	-0.007	0.001	0.005	0.004
	(0.007)	(0.007)	(0.005)	(0.006)	(0.006)
gdp_growth		-2,102	-2,532	-2,893	-2,747
		(2.918)	(2.880)	(2.838)	(2.904)
urban		0.399*	0.687***	0.756***	0.553*
		(0.206)	(0.248)	(0.210)	(0.284)
crime		0.016	0.013	0.013	0.009
		(0.010)	(0.009)	(0.008)	(0.011)
length			0.091	0.060	0.068
			(0.065)	(0.069)	(0.075)
social capital			-4.867**	-4.700*	-5.249**
			(2.426)	(2.478)	(2.513)
chief town				-95.460*	
				(51.688)	
province size					-64,993
					(43.101)
year control	yes	yes	yes	yes	yes
region control	yes	yes	yes	yes	yes
Observations	617	617	617	617	617
R^2	0.468	0.486	0.517	0.53	0.515
First-stage regression					
lsproximity75	-0.396***	-0.312***	-0.344***	-0.293***	-0.237***
	(0.083)	(0.084)	(0.087)	(0.076)	(0.089)
F test of excluded instruments	22.980	13.960	15.720	14.950	7.090

Standard errors in parentheses. Standard errors are robust to heteroskedasticity and corrected for clustering on provinces. *** p<0.01, ** p<0.05, * p<0.1

Table 7: Robustness

dependent variable: litigation rate	(1)	(2)	(3)
lawyers	2.279***	1.323**	1.179**
	(0.813)	(0.515)	(0.529)
gdp	0.001	0.002	0.002
	(0.006)	(0.005)	(0.005)
gdp_growth	-2.321	-2.768	-2.835
	(3.015)	(2.729)	(2.697)
urban	0.598**	0.786***	0.815***
	(0.246)	(0.207)	(0.208)
crime	0.01	0.017**	0.018**
	(0.009)	(0.007)	(0.007)
length	0.07	0.114*	0.120**
	(0.066)	(0.059)	(0.060)
social capital	-4.718*	-5.034**	-5.082**
	(2.486)	(2.365)	(2.355)
Observations	617	617	617
R^2	0.507	0.517	0.514
First-stage regression			
lsproximity86	-0.363***		
	(0.103)		
ls75		45.572***	
		(9.268)	
ls86			43.591***
			(8.994)
F test of excluded instruments	12.560	24.180	23.490

Standard errors in parentheses. Standard errors are robust to heteroskedasticity and corrected for clustering on provinces. *** $p<0.01$, ** $p<0.05$, * $p<0.1$