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EDITORS

Italian Institutional Reforms

A Public Choice Perspective

 Springer

Italian Institutional Reforms: A Public Choice Perspective

Edited by

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Chapter 9

THE "DEMAND FOR JUSTICE" IN ITALY: CIVIL LITIGATION AND THE JUDICIAL SYSTEM

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Abstract: This study provides an interpretative scheme of the so-called “demand for justice” in Italy. Using a microeconomic model of the choice of litigants, the characteristics of the judicial, legal, and economic systems have been modeled as they influence the decisions of the two parties and may cause opportunistic behavior, which, in their turn, may have an impact on the shape of the two systems. An empirically testable model has been derived from this theoretical framework. The empirical analysis shows that lengthy time-spans and raised costs of associated processes and high market rates have a disincentive effect on recourse to justice, which seems to prevail over that connected to opportunistic behavior of the plaintiff. We do not find evidence for the so-called pathological demand hypothesis, which has been emphasized in recent literature.

Key words: Demand for justice, incentives, judicial system.

1. INTRODUCTION

Legal institutions provide an infrastructural platform which is essential for the effective functioning of a market economy. The judicial system is a basic element of this platform. From the point of view of economics, it may be described as a market where the “demand for justice” from citizens is met by the “supply of justice” by judicial institutions. Both economists and entrepreneurs are aware that efficiency in the judicial system and efficiency

in the market are related.¹ Many recent studies have shown that countries where the cost of accessing the judicial system is low and the time for a lawsuit to come before court is short, are countries with a corresponding higher degree of competition in the market.² This relationship between efficiency of a judicial system and efficiency of a market economy explains the growing interest shown by economic literature on this subject.

Even if the efficiency of a judicial system is a multifaceted phenomenon and cannot be simply identified with the length of the proceedings, a crucial prerequisite of this efficiency is a timely conclusion of civil trials. For this reason the slowness of the “machinery of justice” in Italy can be seen as the main source of inefficiency for the Italian judicial system with a negative effect on economic activities. Many factors determine this slowness. We can consider the “supply side” of the problem, which is the productive capacity of the judicial system which depends on the amount of human and physical resources allocated to the judicial system, their efficiency and the rules of procedure. Nevertheless, the excessive litigiousness, which is the tendency to a disproportionate and even superfluous or frivolous recourse to the court system, may be another important source of the gap between the demand for dispute resolution by the courts and their capacity to timely satisfy this demand.

The aim of this study is an empirical investigation of this “demand side”, of the malaise the Italian civil judicial system is suffering. While the focus of the study is a quantitative analysis of the determinants of the volume of civil litigation in Italy, the microfoundations of this demand are inspected and a theoretical model explaining how decisions are taken by litigants is developed.

The interest in the economic impact of dispute resolution began with Landes (1971), Posner (1973) and Gould (1973), who explored the problems associated with litigation from a theoretical point of view. The model in Landes (1971) is based on a two stage process, where both the plaintiff and

¹ For example, the indicators of country risk drawn up by *Business International* include indices of efficiency of justice and the World Bank has approved projects, worth 430 million of dollars, to improve judicial systems in underdeveloped countries or developing countries, opening to market economies.

² See Generale and Gobbi (1996), Bianco, Jappelli and Pagano (1999), Masciandaro (2001), Isae (2001), all of whom, analysing the credit market, have shown that sluggishness in the judicial system brings about rationing processes and distortion of interest rates. Ichino, Ichino and Polo (1998) have discovered that, in the case of Italy, there is a relationship between rigidities in the labour market and how severe judges are in applying the law on dismissal of employees. This results in progressive inefficiency in both systems. Marchesi (2003) finds evidence for a so-called “pathological demand” effect, determined by free riding behaviour and driven by the interest gap between legal and market rates.

defendant have full information. The first stage is the bargaining stage, where the negotiation which takes place between two parties can finish with an out of court settlement, or can go into court. In the second stage, both parties decide on the amount of effort to allocate to the litigation. The allocation of efforts as elements which determine the result of the process to resolve disputes is a central element in a study by Cooter and Rubinfeld (1989). Gould (1973) focused instead on the role of uncertainty and the costs of legal proceedings in determining the outcome of litigation between risk adverse litigants. The higher the legal costs are to access the system, the less law-suits there are.

Shavell (1982, 2003) proposed a model inspired by the “single person decision theory” approach. Posner’s (1973) model can be considered the prototype of this approach. In this framework, the legal action by the potential plaintiff is assumed to be an increasing function of the expected gain from the law-suit. On the basis of this assumption, the decision to go to litigation will be taken only if the expected gain from the law-suit is more than the legal costs. Shavell’s model was extended by P’ng (1983), who introduced strategic behavior on the part of litigants, according to the approach of game theory models where information is incomplete. Informational issues were also analyzed by Bebchuck (1984) and by Nalebuff (1987). In the presence of asymmetrical information, Bebchuck (1984) reached conclusions substantially contrary to those of Landes (1973). Bebchuck models the effects of such asymmetry on the behavior of risk-neutral litigants, assuming that the defendant is aware of his financial resources and prospects in the law-suit, but these remain unknown to the plaintiff. The result is that the “stake” (i.e. the monetary value of the dispute) increases the likelihood that litigation will result in a law-suit rather than in negotiation, as well as the amount requested in order to reach a settlement. Nalebuff (1987) used these results to show that the outcome of litigation depends on how successful a plaintiff is in making her/his threat to go to court credible, when the defendant refuses to negotiate. This credibility problem means that the plaintiff is induced to raise the requested sum with the aim of limiting the defendant’s ability in signaling his “weakness” regarding the plaintiff’s request. These credibility issues yield results substantially different to those of Bebchuck. Successive efforts in describing the decision-making processes involved in the choice whether or not to issue legal proceedings, include studies by Reinganum and Wilde (1986), Rubinfeld and Sappington (1987), Shavell (1989, 2003), Cooter and Rubinfeld (1989), Van Vlijck and Van Velthoven (2000). The empirical literature, dealing with models of behaviour and decision-making processes of both litigants regarding legal proceedings, is relatively large, including works by Fournier and Zhuelke (1989), Farber and White (1991), Perlof,

Rubinfeld and Ruud (1996), Viscusi (1998), Clementz and Krueger (2000), Hersch (2003). Kessler and Rubinfeld (2004) provide a careful review of empirical studies on the civil justice system. In this paper a theoretical and empirical analysis of recourse to the court system for the resolution of civil litigation is proposed. We formulate a formal description of the processes involved in dispute resolution and how behavior of the parties determines how decisions are taken. In this way, we try to identify the so-called “demand for justice”. The model obtained is empirically tested in the Italian context.

The paper is divided into six sections (including this introduction and conclusions). The second section gives a short description of the performance of the civil justice “market” in Italy from 1995 to 2002. The third section describes the theoretical framework, where the behavior of litigants and how they make decisions based on the expected outcome of a law-suit is modeled. Extra-factors influencing the decision of parties to issue legal proceedings, such as the length of the proceedings, lawyers’ fees, macroeconomic conditions, etc, are considered. The objective of this part is to obtain a sufficiently general and consistent model that makes the task of evaluating the separate impact of all these factors on the dynamics of judicial proceedings feasible. The proxy-variables for the empirical analysis are illustrated in the fourth part, while the fifth part discusses the results obtained from econometric analysis.

2. CIVIL JUSTICE IN ITALY: THE ESSENTIAL FACTS

Three factors have an impact on the slowness of the machinery of justice: the flow of new proceedings, which for the purposes of this paper is defined as the “demand for justice” (i.e. demand for judicial services), the flow of concluded proceedings which measures the output provided by the judicial system, and finally the number of pending cases. The latter is an indicator of the excess of demand over productive capacity of the judicial system. Statistics produced by Istat (Central Statistical Office) and the Ministry of Justice illustrate how these factors have, in the course of time, changed on a national scale, in different geographical areas, and in single districts of the Court of Appeal.

The number of civil law-suits which occurred between 1995 and 2003, that is the annual flow of new law-suits, reduced slightly from more than 1,570,000 to 1,559,424. This reduction is in any case of little significance, if compared to the consistent growth in the recourse to justice in the period 1980 to 2003.

In the same period, there was an appreciable increase in the annual number of concluded law-suits, from little more than 1,200,000 in 1995 to 1,490,367 in 2003.

The average length of civil proceedings, despite positive results initially regarding the functioning of the “machinery of justice” and an improvement noted from the beginning of 2000, has nevertheless remained at such high levels that the Court of Strasbourg has many times ruled against the Italian judicial system. 685 days are in fact necessary on average for first degree civil proceedings to be decided upon in our country.

The inefficiency of the national judicial system is even more apparent if we consider that, in 2000, more than 800 days on average were needed to reach a judgment in first degree civil proceedings, while in some civil law countries of the principal Member States of the European Union, the time to reach a judgment was very much less: about 130 days in Germany for first degree law-suits before local courts (*Amtsgericht*), 153 days in France³, and 275 days in Spain.

The high level of litigiousness is one of the major causes of the slowness of justice in Italy. In 2000, while Italy had a rate of law-suits equal to 2.278, the rate in France, Germany, and Spain was respectively 2.009, 1.766, and 1.993.⁴

If we distinguish between different categories of civil proceedings, we can note that the higher quota of arising law-suits is cases of ordinary cognizance. During the time span under study, their incidence with regard to demand notably increased, from 47% in 1995 to 68% in 2003. The significant increase of law-suits of this type was accompanied by the introduction of a new judicial institution, the *Giudice di Pace* (honorary judge). Providing easy access to the citizen and a simplified procedure and hearing, the *Giudice di Pace* contributed to the resolution of little less than 49% of first degree proceedings.

Employment law-suits accounted for 12% of civil cases registered in 2003. In the period under study, the number of cases arising fell to 183,073 in 2003, concluded proceedings slightly increased (little less than 174,000

³ The data on France refer only to proceedings before the Tribunaux d’Instance, which constitutes a significant quota.

⁴ The comparison between common law countries is more difficult, given the tendency to resolve disputes without going to court. For example, the number of claims is the figure that is usually referred to in these cases in England, that is proceedings issued before the County Court. In 2000 this figure was equal to 1,871,923, corresponding to 3.5 law-suits per 100000 inhabitants, with an average period of three weeks to issue proceedings, but from this datum there is no information on cases which were settled out of court, which in fact represents 90% of the cases.

law-suits in 2003), while the number of pending proceedings decreased (from more than 370,000 in 1995 to about 354,000 in 2003).

Social security law-suits represented 21% of registered civil law-suits in 2003. The demand in this sector (more than 322,000 registered law-suits) underwent a dramatic reduction from 1995 to 2003, accompanied by a reduction in the number of concluded law-suits (327,000 approximately) and pending cases (little less than 752,000). It should be noted however that the recourse to justice in the area of social security increased significantly in second degree courts.

Changes in the law have had considerable effect on employment and social security law-suits. The transfer of competences in first degree cases from the *Preture* (magistrate's courts) to the *Tribunali* (courts), and of the right to appeal to the *Corte di Appello* (court of appeal) from the *tribunali*, has resulted in confusion and malfunctioning, which have been partly resolved over time.

As far as the average length of first degree law-suits is concerned, the resolution of both ordinary cognizance and social security cases tends to be quicker.⁵ However, the data regarding employment law-suits is less positive, from 589 days in 1996 to 706 days in 2003.⁶ Social security law-suits continue to remain the longest, in part due to the increased number of these suits coming before the courts for judgment (73%, compared to an average of 56.4% for civil law-suits).

A different situation emerges from an analysis based on geographical area. While the south shows a particularly high number of law-suits per inhabitant, and an increasing trend in the last two years, the centre and the north reveal, after a rapid increase between 1995 and 1996, a rather stable and more contained demand for judicial services, compared to the south. A similar increase in concluded law-suits is revealed in the centre but the number of pending cases has not decreased in any significant way. The north, partly favored by less demand, registered a reduction in pending cases from 1995 to 2003. The court districts of central Italy are also characterized by an improvement in the number of pending cases as a result of an increase in the number of concluded cases.

This situation is even more evident from the disaggregation of data of the *Corte di Appello* districts. North Italian districts evinced a generally

⁵ From a detailed analysis of the average length (in days) of concluded proceedings in 2001, based on judgments handed down in particular areas of law, it emerges that the longest concern the payment of pensions to survivors of pensioners, while the shortest concern the payment of invalidity pensions.

⁶ From a careful inspection of the average length (in days) of proceedings in 2001 where a judgment was handed down, it emerges that the longer ones principally concerned the payment of commissions, fees and other payments and the protection of maternity rights, while the shorter ones concerned the protection of liberty and trade union activity.

restrained demand for first degree cases in 2003, (Trento, the branch districts of Bolzano, Brescia and Venice). The districts with the higher quotient of civil law-suits per inhabitant were Naples, Salerno, Bari, Catanzaro, Reggio Calabria, and Messina.

If we distinguish between different civil law-suits, we can note that while social security law-suits per inhabitant tend to reduce (except Naples), employment law-suits increase, particularly, in Reggio Calabria and Catanzaro, and ordinary cognizance law-suits show significant increases, principally in Bari, Salerno, Catanzaro, Messina and Reggio Calabria.

The number of arising, concluded and pending law-suits is a decisive factor regarding the average length, which is longer in the south compared to the centre and north. After an initial period when the length of proceedings was longer in central Italy, the length of civil law-suits in the south increased compared to other areas from 1997, reaching a peak in 2001. The average length of a law-suit in the south has undergone an inversion since 2002, significantly narrowing the contrast with the centre of Italy.

At a district level, first degree civil law-suits with an average length greater than 800 days for the year 2003 were located principally in the south (Bari, Messina, Potenza, Reggio Calabria, and the court area of Taranto). The districts of Bari and Salerno showed a higher average length for employment law-suits, as did Taranto, followed by Reggio Calabria, Catanzaro and Messina for social security law-suits.⁷

3. THE THEORETICAL MODEL

In this section we develop an economic model of a litigant's decision to go to trial or to accept an out- of-court settlement. The model - following the spirit of Shavell (1982), Fournier and Zhuelke (1989) and Van Vlijck and Van Velthoven (2000) - considers the choice between settlement or going to court as a function of the difference between the minimum sum requested by the plaintiff in order to interrupt the suit and the maximum sum which the defendant is willing to pay to reach a settlement. The parties fix these sums, basing them on their expectations regarding the possible outcome of the case, the costs of proceedings and the costs of negotiation.

The first step is to examine the behavior of the two litigants. From the point of view of the plaintiff, the decision to issue proceedings involves cost-benefit analysis. The benefits of recourse to the judicial system are represented, principally, by the damages which the plaintiff expects to be awarded, in the case of a judgment in her/his favor. The costs include the

⁷ Detailed tables are available on request.

costs of access to justice plus legal expenses, and any eventual loss as a result of a judgment for the defendant. The differential between legal interest's rates and market interest rates may play a role in determining the capitalized values of both expected benefits and costs, together with the time expected for the law-suit to be concluded.

A plaintiff in deciding whether or not to issue legal proceedings should evaluate the following two possibilities:

- if, with probability π_l , she/he wins the law-suit, at the conclusion of the law-suit, after n periods, she/he will have a net benefit equal to the future value of damages S , capitalized at the legal rate i_l , minus the legal costs sustained, capitalized at the market rate, plus the share of legal expenses which the defendant will be ordered to pay to the plaintiff. Therefore, we can write the net benefit to the plaintiff in the following way:

$$B^p = \pi_l [S(1+i_l)^n - C(1+i_m)^n + \alpha C(1+i_l)^n] \quad (1)$$

with $0 \leq \alpha \leq 1$, where S is the damage that the plaintiff wants to be awarded, i_l and i_m are respectively the legal and market interest rates, C is the total cost of the lawsuit and α is the share of the plaintiff's legal expenses which the defendant is ordered to pay.

- if, with probability $(1-\pi_l)$, the plaintiff loses the suit, then she/he will experience a loss L^p equal to the sum of the eventual payment that the defendant offers in order to reach a settlement, capitalized at the market rate, the share of the expenses which the court orders to be paid to the defendant, capitalized at the legal interest rate, and its own actual costs of the law-suit capitalized at the market rate.²¹ Therefore, the loss to the plaintiff should she/he lose the case is equal to:

$$L^p = (1-\pi_l) [P^d(1+i_m)^n + C(1+i_m)^n + \alpha C(1+i_l)^n] \quad (2)$$

where P^d is the payment offered by the defendant for a settlement. We assume the cost of the lawsuit is the same for the plaintiff and the defendant.

The particular subjective values which a plaintiff may have with regard to the likelihood of winning a law-suit reflect information which she/he has and his/her degree of optimism. Nevertheless, once the likelihood has been evaluated, the plaintiff can then attribute a particular value to it, based on how inclined she/he is to taking the risk. Equally, she/he will attribute a

subjective value to the estimated benefits and losses which have been described, both on the basis of objective considerations, such as the actual gain, and on the basis of its utility function of gains compared to losses. In order to take account of these elements which influence any choices made, the following value function⁸ can be used to define the value of the lawsuit for the plaintiff:

$$W^p(\pi_1, B^p, L^p) = \varphi_1^p(\pi_1)V_1^p(B^p) + \varphi_2^p(1-\pi_1)V_2^p(L^p) \quad (3)$$

with $V_i' > 0$, for $i = 1, 2$; $V_i'' < 0$ and $V_2'' > 0$; $V_1^p(B^p) > 0$ and $V_2^p(L^p) < 0$, where φ_1^p and φ_2^p represent the subjective value functions of the plaintiff regarding the likelihood of winning or losing the law-suit, and V_1^p and V_2^p represent the subjective evaluations of the respective gains and losses expected.

For the plaintiff to consider it in her/his interests to issue legal proceedings, the difference between the net benefits expected in the case of winning and the loss expected in the case of losing must be positive. Thus, the following condition needs to be satisfied for the plaintiff to consider it in her/his interests to go to court:

$$W^p(\pi_1, B^p, L^p) > 0. \quad (4)$$

The functions φ_1^p and φ_2^p play an important role in this model because a litigant decides under both uncertainty and asymmetric information. The probability π_1 , which should reflect uncertainty, is in general evaluated by lawyers who have information that a plaintiff does not have. Asymmetric information between lawyers and their clients raises two specific problems. The first one is a typical principal/agent problem. The second problem is due to the possible sharing of risk between the client and lawyers. These two problems have been investigated by vast literature on the effect of the lawyers' remuneration system, that is to say contingency or time fees based remuneration systems, and on the effect of the rules on the sharing of legal expenses between winners and losers of a lawsuit. Both the remuneration system of lawyers and the rules on the sharing of legal expenses affect the decision to issue legal proceedings because they affect the behavior of lawyers and the amount of risk faced respectively by plaintiffs and lawyers.

As described by equation 2, the plaintiff's decision to go to court is crucially determined by the reserve sum P^d that the defendant accepts to pay for a settlement. When the plaintiff considers a law-suit worthwhile, the defendant has to choose whether or not to make an offer to reach a

⁸ See Khaneman and Tversky (1979).

settlement or to behave so as to encourage the plaintiff to go to court. This implies that the offer made by the defendant should at least correspond to the sum that determines a non-positive value of a lawsuit ($W^p(\pi_l, B^p, L^p)$) for the plaintiff. This sum, denoted as P^{p*} , which represents the plaintiff's reserve sum to reach a settlement, can be higher than the maximum amount which the defendant is willing to pay, that is the defendant's reserve sum, and in this case the litigants go to trial.

The defendant fixes her/his reserve sum carrying out an evaluation similar to the plaintiff but from the opposite point of view. The defendant's decision, therefore, depends on the estimate of the value function associated with expected costs and benefits of the law-suit. This value function may be written as follows:

$$W^d(\pi_2, B^d, L^d) = \varphi_1^d(\pi_2)V_1^d(B^d) + \varphi_2^c(1-\pi_2)V_2^d(L^d) \quad (5)$$

$$\text{with } B^d = \pi_2[P^{p*}_e(1+i_m)^n - C(1+i_m)^n + \alpha C(1+i_l)^n]$$

and

$$L^d = (1-\pi_2)[S(1+i_l)^n + C(1+i_m)^n + \alpha C(1+i_l)^n],$$

where $V_1^d(B^d) > 0$ and $V_2^d(L^d) < 0$ and P^{p*}_e is the sum that the defendant expects to bring to zero W^p , the plaintiff's expected gain from the lawsuit. The more P^{p*}_e is high the more W^d can be positive. Note that P^{p*}_e is different from the defendant's reserve sum, that we denote as P^{d*} , that is to say the maximum amount he is willing to pay, corresponding to the value of P^d that brings to zero its value function.

Now we can determine the circumstances which lead to proceedings being issued. It depends on the differential between the respective reserve sums that the two parties would be willing to bargain with, to reach a settlement. In other words, the settlement is a possible solution only when the maximum amount that the defendant is willing to pay, P^{d*} , is greater than or equal to P^{p*} , the minimum amount the plaintiff wants to receive. Vice-versa, proceedings are issued if $P^{d*} < P^{p*}$.

Note that in case of incomplete information, the legal proceedings can commence even if this condition is satisfied. If we assume imperfect information, the plaintiff's expected reserve sum, P^p_e , can be different from the plaintiff's true reserve sum, P^{p*} . This latter assumption may be realistic, for instance, in a game in which the plaintiff has imperfect information on the maximum amount the defendant is willing to pay and may consequently

decide to issue legal proceedings, even if the value of the suit is expected to be negative, with the aim of pushing the defendant to offer her/his true reserve sum. In this case, called *negative value suit* in the literature, the behavior of the plaintiff can be rational because the defendant has symmetrically imperfect information of the true value of the reserve sum of the plaintiff and consequently is uncertain about the credibility of the threat. These cases are significant in determining the number of trials and the more likely they are, the more likely it is to finally reach a settlement before the judgment.

3.1 Conditions for a law-suit

The values of P^{d*} and P^{p*} , the reserve sums for a settlement by the plaintiff and the defendant, can be easily obtained from the simplified suit value function for both parties, that we assume for empirical analysis in the following form:

$$W^i(.) = B^i + L^i + \theta M ; \quad i = p, d \quad (6)$$

This equation is obtained by the algebraic sum of costs and benefits, plus a function of vector M , which includes all the factors that can influence evaluations by the parties and their lawyers, determining the functions φ_j^i and V_j^i . These factors are related to culture, characteristics of the judicial order, socio-economic characteristics of the territory, income per capita, behavior of lawyers, etc... All these variables can increase or decrease the subjective value of the net benefit expected by litigants. In this way the function of net benefits of the plaintiff and the relative advantage of going to court become:

$$\begin{aligned} W^p = & \pi_1 S(1+i_l)^n - (1-\pi_1)P^d(1+i_m)^n - C(1+i_m)^n - \\ & - (1-2\pi_1)\alpha C(1+i_l)^n + \theta M \end{aligned} \quad (7)$$

Analogously, it is possible to establish the net expected cost for the defendant, and so the value of being sued, is:

$$\begin{aligned} W^d = & \pi_2 P^d (1+i_m)^n - (1-\pi_2)S(1+i_l)^n - \\ & - C(1+i_m)^n - (1-2\pi_2)\alpha C(1+i_l)^n + \theta M \end{aligned} \quad (8)$$

The values of P^{p*} and P^{d*} can be obtained from equations 7 and 8, remembering that these are the values of P which satisfy the condition W^p and $W^d = 0$:

$$P^{p*} = S \frac{(1+i_l)^n}{(1+i_m)^n} \frac{\pi_1}{(1-\pi_1)} - C \frac{1}{(1-\pi_1)} - \alpha C \frac{(1+i_l)^n}{(1+i_m)^n} \frac{(1-2\pi_1)}{(1-\pi_1)} + \theta^p M \frac{1}{(1+i_m)^n} \frac{1}{(1-\pi_1)} \quad (9)$$

$$P^{d*} = S \frac{(1+i_l)^n}{(1+i_m)^n} \frac{(1-\pi_2)}{\pi_2} + C \frac{1}{\pi_2} + \alpha C \frac{(1+i_l)^n}{(1+i_m)^n} \frac{(1-2\pi_2)}{\pi_2} - \theta^d M \frac{1}{\pi_2 (1+i_m)^n} \quad (10)$$

We can now write the condition for proceedings being issued $P^{p*} > P^{d*}$ as follows:

$$0 \leq P^{p*} - P^{d*} = S \frac{(1+i_l)^n}{(1+i_m)^n} \left[\frac{\pi_1}{(1-\pi_1)} - \frac{(1-\pi_2)}{\pi_2} \right] + \left[\frac{1}{\pi_2} + \frac{1}{(1-\pi_1)} \right] - \alpha C \frac{(1+i_l)^n}{(1+i_m)^n} \left[\frac{(1-2\pi_1)}{(1-\pi_1)} + \frac{(1-2\pi_2)}{\pi_2} \right] + \left(\theta^p \frac{1}{\pi_2} - \theta^d \frac{1}{(1-\pi_1)} \right) M \frac{1}{(1+i_m)^n} \quad (11)$$

Note that this condition implies that, if we disregard the role of factors included in vector M , a positive probability that a proceedings will be issued requires $\pi_1 > (1 - \pi_2)$, that is a positive result for the plaintiff should be seen as more probable by the plaintiff than by the defendant. In this case, the square brackets term in the first addend is positive and the square brackets term in the third addend is negative and, in consequence, the probability of a law-suit is a negative function of market interest rate and legal costs and a positive function of legal interest rate, the amount of damages that the plaintiff asks to be awarded and of the share of the winner's legal expenses that the loser has to pay. Equation (11) also shows that, insofar as the

market interest rate is higher than the legal interest rate, the longer the length of the law-suit is, the probability that legal proceedings are issued is less.

Because M is a vector of different factors, there is no a priori expected sign of the coefficients θ . The model, taking account of the value functions of both litigants, extends the results of traditional models of conflict resolution in such a way as to incorporate the varying behavior and subjective evaluation of litigants and lawyers.

In the subsequent sections we present the estimates of a demand function of judicial services in Italy, where the demand is measured by the flow of civil proceedings. This flow of proceedings, normalized for the number of inhabitants of every court district, is a function of the variables which determine the likelihood of proceedings being issued.

4. DEFINITION OF THE VARIABLES

The flow of civil proceedings arising in Italy from 1991 to 2002 has been reconstructed using data provided by the Ministry of Justice and official publications of Istat.

The dependent variable (or rather the “demand for justice”) has been defined as the number of civil proceedings which arose in the period examined, disaggregated at the district level of the *Corte d’Appello* and normalized for the number of inhabitants of the district.

As we have seen, numerous factors have an impact on the dependent variable. There are other variables to be taken into account, such as those which are economic, social, and demographic (represented by the vector M of the model), besides those which come directly under the cost benefit functions of the parties.

In our analysis, the deviation of the effective product from its potential level plays an important role, as it is a measure of the economic cycle. There is no agreement on the direction of relationship between the economic cycle and the dynamics of litigiousness. Opinion among academics about the expected effect of this variable varies.⁹ On the one hand, we can hypothesize that a reduction in the number of civil law-suits could be caused by an expanding economy, characterized by an increase in prices and demand from the market, and by a generally low risk of insolvency. In this case, the relationship would be negative. On the other hand, an economy in recession sees an increase in recourse to the civil courts, as deterioration in company cash flows and general economic conditions increase the risk of insolvency, and consequently the number of civil law-suits increases. Some also

⁹ See Musy (1999) and Clemenz and Krueger (2000).

hypothesize about a pro-cyclical pattern, an increase in the number of law-suits due to economic growth. More contracts are signed in an expanding economy, thus increasing the number of contracts that may not be complied with, leading to law-suits. If the real GDP per capita increases, transactions per individual increase, and these transactions may generate civil law-suits.

The legal interest and market rates may also have an impact on the demand for civil justice. From the point of view of the plaintiff, in as much as the legal interest rate is less than the market interest rate, there is a disincentive to issue legal proceedings, and this situation makes it convenient for the other party to be non-compliant in circumstances where default interest rates *ex contracto* have not been agreed, which are higher than legal interest rates. In particular, a debtor can take advantage of this difference, the creditor becoming a financier or rather a source of money at low cost.

With regard to the length of the proceedings, as for interest rates, it is possible that private agents, rather than interested in actually resolving a legal issue, were motivated by opportunistic behavior (free-riding). A recent collection of studies¹⁰ on justice in civil cases in three common law countries, Australia, Great Britain and the United States of America, and in ten civil law countries, Brazil, France, Germany, Greece, Italy, Japan, the Netherlands, Portugal, Spain and Switzerland, shows how unwieldy procedures and protracted lengths do not result from legal systems, but from their distorted use.¹¹

As far as legal costs are concerned, the client, except in the case that a different agreement has been reached, must pay in advance unavoidable expenses and make interim payments. The fee is always due from the client to the lawyer in Italy, even when there is no chance of damages being awarded. When a law-suit is concluded, the judge orders the losing party to pay the legal expenses of the other party, other than expenses which are excessive and superfluous, together with the losing party's own expenses.

This *a priori* analysis does not admit an unambiguous interpretation of the effects that legal expenses have on the likelihood of bargaining. It could be expected here that the higher the costs are, the more likely it is to reach a settlement without going to court. On the other hand, one could assume that in the case of substantial expenses, bargaining appears less advantageous (and so less likely) for the plaintiff. In order to preserve the credibility of the threat to go to court, the plaintiff should raise his reserve sum for an agreement, thus reducing the chance of bargaining. To test the effects of this

¹⁰ Zuckerman (1999).

¹¹ The party who wants to put off complying with an agreement for example, usually uses opportunistic behavior. This distortion may be reinforced by collusion between the lawyers of the two parties who can extract economic advantage by prolonging times.

variable on the “demand for justice”, we have used the average earnings of lawyers as an alternative to their fees.¹² The use of this variable entails a problem linked to the fact that professional fees, such as those approved by D.M. 05.10.1994 n. 585, are also related to the value of the law-suit. As a consequence, an increase in the earnings of lawyers could be due to an increase in the object value of the case, rather than the fees asked for. Finally, the number of lawyers has been used in the estimates as a proxy of “barriers to entry” in the judicial market, i.e. the conditions which make the judicial system more accessible.

5. ECONOMETRIC SPECIFICATION AND RESULTS.

5.1 The estimated equation

This section presents the econometric specification of the model outlined in the previous sections and looks at the results obtained by estimating an equation which represents the “demand for justice” in Italy. This demand is the dependent variable of our model and is measured as the rate of occurrence of proceedings, that is the flow of civil law-suits per capita. In the period 1995 to 2003, the total number of law-suits which transpired shows a downward trend (as seen in section 2), with higher values in the south, compared to the centre and north.

The analysis was carried out using a panel of 312 observations, obtained from a set of 26 districts - the cross-sections of our sample - monitored from 1991 to 2002. The method of estimation used in the estimates is the model with *fixed* effects (*cross section weight*), based on the consistent estimator HAC in order to correct the problems of heteroskedasticity and auto-correlation. The estimate was repeated with the GMM method, which supplies consistent estimators when a dependent lagged variable is included.

A specification in logarithmic first differences was used for the analysis. This provides both a dynamic specification of the model, which was selected using an identification procedure from “general to specific”, and a solution

¹² The lack of data on the expense of accessing justice per district variable makes it impossible to consider this variable in an explicit manner; since the tariffs are fixed for the period considered (arts. 1 and 2 Law 7.02 1979 n.59 as last amended by art. 241, dlgs. 19.02.1998 n.51, finally replaced by the unified contribution laid down by Law 23.12.1999 n. 4888 and successive amendments) and since these conditions only slightly effect the overall cost, we consider only the legal costs.

of the problem of non-stationarity. Usual unit root tests revealed that the dependent variable is integrated of order one (see Table 9-1).

The explicative variables of the model are:

- the average length of proceedings (*Length*);
- the real earnings (W95) and the number of lawyers (*NLaw*);
- the real rate of market interest (MR) and the real rate of legal interest (LR);¹³
- an alternative to the likelihood of winning represented by the chance to resolve litigation by conciliation (and so a reserve sum expedient for the plaintiff), measured as the ratio of concluded suits without court orders over a total of concluded suits (*Deal*);
- the business cycle, proxied by the ratio of the real value added to its trend (*Cycle*). The trend is obtained using the decomposition method suggested by Hodrik and Prescott (1997);
- finally, a *dummy* was introduced in the estimates for the year 1995 (d95), to take into account the institutional reforms of that year, with the introduction of the *giudice di pace* (honorary judge).

Formally, the estimated equation is:

$$\begin{aligned} \Delta \log(X_{it}) = & \alpha_{i0} + \gamma_1 * (Ec) + \beta_1 * \Delta \log(Length_{it}) + \beta_2 * \Delta \log(W95_{it}) + \beta_3 * \\ & \Delta \log(NLaw_{it}) + \beta_4 * \Delta MR_{it} + \beta_5 * \Delta LR_{it} + \beta_6 * RM_{it-1} + \beta_7 * LR_{it-1} + \beta_8 * \Delta(Deal)_{it} \\ & + \beta_9 * \Delta \log(Cycle)_{it} + \beta_{10} * D95 + \varepsilon_{it}. \end{aligned} \quad (12)$$

Equation 12 is based on an *error-correction model*. It says that, *coeteris paribus*, the change in *X* is due to the current change in *Length* plus an error-correction term ($Ec = X_{it-1}/Length_{it-1}$). The econometric model presupposes long term equilibrium between the recourse to legal action and the length of the proceedings, with elasticity constrained to be one between the two variables. Besides this long run equilibrium, the flow of proceedings is determined by changes in the *Length*, and in the other right hand side variables, which represent the short run dynamics of the model, that is the response of the dependent variable to fluctuations in the explicative variables. In other words, the relationship between the number of law-suits arising and the length of the proceedings is fixed in the long run, while in the short run, the rate of change in law-suits arising depends on the following: rate of change of the length of the proceedings; rate of change in the number of lawyers and past levels of their real earnings; lagged levels and changes in real rates of interest, and in cyclical fluctuations, and changes in percentage of negotiation (*Deal*).

¹³ Rates of interest in real terms are obtained by subtracting from nominal rates the rate of inflation, measured as the first difference of the logarithm of the consumption price deflator in 1995 euros.

Therefore, this econometric specification translates the theoretical framework developed in the previous sections into an empirical, estimable model through the use of *proxy* variables. In this way, the decision to go to court to resolve disputes between parties is modeled in terms of a series of incentives and disincentives which directly determine the parties' behavior and indirectly influence the "demand for justice". The incentives are represented by variables such as the legal real rate of interest (*LR*) and the incidence of bargaining (*Deal*), while the disincentives are represented by the average length, the market real rate of interest (*MR*), and the cost of the law-suit approximated by the income per capita of lawyers (*W95*). The relationship between the flows of proceedings and the variables mentioned above is "isolated" from the effect of disturbing factors which could alter it, through the use of "control variables" – economic cycle, number of lawyers.

Table 9-1. Panel unit root tests

Method	Statistic	Prob.**	Cross-sections	Obs.
<u>Null: Unit root (assumes common unit root process)</u>				
Levin, Lin & Chu t*	-2.06259	0.0196	26	260
Breitung t-stat	2.54163	0.9945	26	234
<u>Null: Unit root (assumes individual unit root process)</u>				
Im, Pesaran and Shin W-stat	0.38685	0.6506	26	260
ADF - Fisher Chi-square	52.5665	0.4520	26	260
PP - Fisher Chi-square	57.0594	0.2926	26	286
<u>Null: No unit root (assumes common unit root process)</u>				
Hadri Z-stat	4.52806	0.0000	26	312

Sample: 1991 2002. Exogenous variables: Individual effects User specified lags at: 1**
 Newey-West bandwidth selection using Bartlett kernel Balanced observations for each test
 Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

5.2 Results

Table 2 summarizes the key results of the empirical analysis. The principal variables considered¹⁴ are significant, and the values of Standard Error of regression (SE) and of R^2 corrected for degree of freedom confirm

¹⁴ The variables chosen are those which have passed standard significance tests and that are retained on the basis of a selection procedure inspired by the "general to specific" approach. Details are omitted here for reasons of brevity.

that the model fits well to the data (considering the dynamic specification - first differences).

Looking at column 1 of Table 2, we observe that the total normalized number of arising laws-suits reacts negatively with the average length of proceedings, the market rate, the income of lawyers and the cycle. On the other side, arising law-suits are influenced positively by the legal interest rate and by the number of lawyers. Given the dimension of estimated parameters, these results point out that a one per cent increase in the average length of law-suits reduces by about 0.75% the recourse to the courts in the short term.

The negative sign of the relationship with the three principal variables just mentioned is easily understood if we consider that those variables for the plaintiff substantially represent both implicit and explicit costs and therefore have a “discouraging” effect on whether to have recourse to the court, or not. In particular, as far as the length and the interest rates are concerned, the coefficients of the equation which have been outlined, depend both on the direct effects that these variables have on the behavior of the plaintiff, and on the indirect effects associated with the behavior of the defendant. In this sense, the coefficient signs of the variables, which measure the influence of the average length and of interest rates on the dependent variable, show the clear prevalence of the direct effects. It seems that the so-called pathological components of the demand do not have any significant influence on directing the action of the plaintiff, at least in the period which we are examining. Similarly, the cost of a law-suit approximated by the income of lawyers has a negative effect on the rate of law-suits, as claimed in the theoretical model. As has already been said, the meaning of this variable is ambiguous, in the sense that being correlated to the value of the suit, it could also represent the requested payment by the plaintiff; nevertheless, the negative sign points out the prevalence of the first effect. On the contrary, the number of lawyers, which in our model represents an indicator of conditions to access the legal system, is positively correlated to the rate of law-suits. This implies that an increase in the supply of legal services increases the use of the courts.

The ratio of effective output (value added in real terms) to its potential is a proxy for the business cycle, a crucial signal of the economic condition of the district. The negative sign of both the terms grasping this effect (lagged levels and rate of change) sheds light over the controversy about the possible impact (positive or negative) of cyclical fluctuations on the number of suits (see section 3). Hence, our analysis does not reject the (alternative) hypothesis that associates an increase in the number of civil law-suits with a decrease in economic activity, due to deterioration in cash flows of companies and general economic conditions, increasing the risk of insolvency.

Therefore, considering the role of this variable, together with the lower incomes of lawyers in the south, we can more easily understand why the rate of civil litigation is higher in the south, where economic and financial conditions are less flourishing.

The variable *DEAL* is a proxy of the likelihood of negotiation. If we consider that a strategic use of issuing proceedings (as a threat for the “defendant”) is possible and that resolution of the suit before the court hearing involves, not only reduced costs, but also less tediousness and procedural complexities, then the positive sign of the coefficient associated with this variable indicates that increasing the possibility of negotiation also increases the incentive to go to court to settle the suit. In any case this variable is significant only at a 90% level of probability. The *dummy* for the year 1995 is even less significant. In other words, our model is not able to detect a separate role for the introduction of the *giudice di pace*. Obviously, it is possible for this structural change to be understood through the “fixed effects” of the model.

The estimation of the same equation using the “generalized method of moments” (GMM) substantially confirms the reliability of the GLS estimates.¹⁵

Table 9-2. Results

	Total number of law-suits	Ordinary cognizance	Employment	Social security
C	1.487	1.179	2.538°	-2.601
Log(X(-1)/ Length (-1))	-0.150	-0.085	-0.338	-0.073
Log(Length)	-0.740	-0.672	-0.630	-0.479
(Deal)	0.201*	0.118*	0.083	0.322
Log(NLaw)	0.458*	-0.107*	-0.332	0.249°
Log(W95(-1))	-0.121	0.354	2.634	0.419
LR	3.309	1.345	-6.517	8.398
MR	-2.706	-2.020	10.449	3.279°
LR(-1)	6.103	3.075	-4.134*	12.624
MR(-1)	-4.547	-2.435	8.684	-6.999
Log(Cycle)	-0.764	-0.990	2.429	-2.663
Log(Cycle(-1))	-0.947	-1.239	2.431	-3.084
D95	0.019036°			
AR(1)	-0.221	-0.357		-0.584
AR(2)			-0.299	-0.407
Sample	1994-2002	1997-2002	1998-2002	1998-2002
Total Panel Observation	234	156	130	130
Adj-R ²	0.676	0.803	0.644	0.645
SE	0.108	0.102	0.185	0.185
DW	2.05	2.26	2.27	2.28

Method: Panel EGLS.

¹⁵ GMM estimates, here omitted for lack of space, are available on request.

The results, discussed so far, concern the general analysis carried out on the total number of law-suits arising for the district of the *Corte d'Appello*. Columns 2, 3, and 4 of Table 9-2 depict the results obtained disaggregating the flows based on the type of legal action – ordinary cognizance, employment and social security – and show interesting differences compared to the aggregate. In fact, while the relationship in the long term between the flow of proceedings and their length remains unaltered, the effect of other factors is modified in some suits. There are not any significant changes in the coefficient signs in a suit of ordinary cognizance, while for employment proceedings the inversion of the direction of the relationship with the economic cycle should be particularly noted, showing a positive correlation with the number of law-suits arising. This can be interpreted as evidence of the fact that in phases of expansion, not only do employment contracts increase and so the number of possible litigants, but also the capacity of businesses to satisfy potential claims by employees is increased; vice-versa, in a period of recession, businesses in difficulty, when proceedings have been issued against them, might not have the means or the interests to satisfy demands from the plaintiff (for example, reinstatement or increasing a lump sum payment, wage increases, etc.). An inversion in the sign of interest rates is noted. This can be interpreted as the prevalence of opportunistic behavior in this type of “suit” on the part of the defendant. In any case, it should be remembered these proceedings require capitalized payments in advance. Consequently, the importance of the real rate of interest becomes predominant.

6. CONCLUSIONS

The present study provides an interpretative scheme of the so-called “demand for justice” in Italy. The *bel paese* seems in fact to be characterized, more than its European partners, by congestion in the judicial system and by a notable sluggishness with regard to the time required for the resolution of civil litigation. The fundamental question is if these anomalies have to be linked to problems more on the supply side than on the demand side. In the past, we observed an effort by policy makers to strengthen the judicial system, directed principally at increasing the “stock” of judges (the number of which per inhabitant has almost doubled since 1950 to today). It seems that this attempt was unsuccessful.

Using a microeconomic model of the choice of litigants, the characteristics of the judicial and legal systems (procedural costs, legal rates, etc.) and of the economic system (market rates, income growth, cycle) have

been modeled as they influence the decisions of the two parties and may cause opportunistic behavior, which, in their turn, may have an impact on the shape of the two systems. An empirically testable model has been derived from this theoretical framework

The empirical analysis, carried out, using a sample of 26 cross-sections (Districts of *Corte d'Appello*) for the years from 1994 to 2002, shows that lengthy time-spans and raised costs of associated processes and high market rates have a disincentive effect on recourse to justice, which seems to prevail over that connected to opportunistic behavior of the plaintiff. We do not find evidence for the so-called pathological demand hypothesis, which has been emphasized in recent literature. This could also partly explain the decreasing trend of the number of cases arising in recent years. A sub-optimal level of suits may emerge simply because the private incentive to bring suit is misaligned with the socially optimal incentive to do so, and the gap between them could be in either direction. Further analyses show that the results can also evince interesting differences if different areas of litigation are considered. In this case, a relevant role is exercised by the economic cycle, the responsiveness to which becomes positive for law-suits in employment and social security matters, while its impact is negative for first cognizance law-suits.

As a policy implication, these results renew the interest for structural reforms, first directed at increasing efficiency on the supply side, given that the pathological components of the demand do not seem so important in explaining the increase of the length of proceedings. The problem here is to ensure consistency between the design and implementation of structural reforms so that the implied changes may prove to be effective.

We feel that our study throws fresh light on these problems and provides a starting point for further analysis. Ideally, it should become part of a greater project of economic analysis of the Italian judicial system. Further developments should include an inquiry on the supply side - the capacity of the judicial system to satisfy the demand for justice from the citizens - together with an "equilibrium" analysis of the interaction between demand for and supply of justice and the consequences on the performance (growth and efficiency) of the economic system, and finally a more in-depth comparison between judicial systems of different European and non-European countries.

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