NEW DISPUTES AND DELAY IN ITALIAN COURTS

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by

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Abstract

Gravelle (1990) has shown that delay works as measure of the excess of demand characterizing a judicial system. In this paper, we adapt the Gravelle's argument to Italian judicial system in order to verify whether it works, in the sense that delay discourages potential plaintiffs from starting a new dispute. Results of our analysis show a negative short-run impact of delay on new legal disputes according to Gravelle's theory. By contrast, we do not find any long-run effect of delay on the demand of justice.

1. Introduction

Economically thinking, the judiciary system can be considered as a large market where justice is traded in terms of legal disputes. If such a market worked applying competitive rules, whenever a proper motive for dispute arises a citizen would show his own demand of justice by turning to a court that would be able to discover the truth within a reasonable time.

By contrast, real world is different from such hypothetical market, at least in some countries like Italy where legal disputes (specially civil ones which our analysis is focused on) are not conducted using competitive criteria and are usually decided after more than ten years on average. Such general inefficiency characterizing civil justice in Italy is due to many factors that negatively influence court performances.

On the demand side, its progressive increase registered in the last decade has contributed to emphasize inefficiency on the supply side([1]). In other words, public resources allocated to the justice sector have turned out not enough to face up the increasing demand of legal disputes. It has determined a continuous increasing in justice delay that is recognised as the main problem affecting Italian justice system.

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([1]) See Bianco-Palumbo (2007), Caso (2008), Contini *et al* (2007).

Landes (1971) analyzed the effect of delay on trial demand focusing on criminal trials. On the otherhand, Priest (1988) focused on civil trials in Illinois assuming that delay only affects parties' post-dispute behaviour and keeping the number of new disputes as fixed.

On a different point of view, Gravelle (1990) has theoretically shown that delay characterizing civil justice is rather a rationing system since it helps reduce "the demand for trials until the number of trials demanded by litigants is equal to the capacity of courts". In other words, it can be said that delay works as measure of the excess of demand characterizing a judicial system.

On this point, Gravelle starts from an obvious consideration that both justice demand and delay would significantly decrease by raising up judicial costs. In particular, other authors([2]) have shown that rationing systems by waiting do not sort out efficient outcomes in those markets with non-market-clearing money prices; in such cases, rationing by price turns out the best policy in terms of efficiency. By contrast, Gravelle retains that in the justice sector rationing by price is Pareto-dominated, so that rationing by waiting sorts out a preferable policy. He comes to this conclusion in light of two reasons. First, the demand for trials is composed by sequential decisions: in fact, parties usually try to settle and only if they do not reach an agreement then the damaged party may decide to go for trial. So, rationing by price and reducing delay could not avoid that parties take the wrong decision.

Second, he says that courts ration by waiting list rather than waiting line, so the plaintiff has not to spend any effort once he puts his name on a list for the time he has to wait for. Furthermore, in those systems (like the US one) in which trials work as precedents for future disputes, so they may be considered as positive externalities. Then, Gravelle argues that if the benefit represented by precedents created is lower than trial costs, then delay is efficient because it reduces the net cost of a trial.

Gravelle takes into account how delay may influence both pre-dispute and post disputes decisions of parties. If there is an accident, people involved into it bargain over a possible agreement; if not reached, then the case is tried. Under a strict liability regime, the court will try to estimate the plaintiff's loss and impose the defendant to pay it. If such decision will be given after a certain period of time, then delay may negatively affect the expected value of trial. At the same time, both parties have to effort expenses, like lawyers fees, which are assumed to be increasing in delay. Then, Gravelle concludes that the plaintiff's willingness to accept an offer before trial is increasing in delay if it significantly reduces the expected value of trial.

Such approach is an application to litigation (Shavell, 1982) of the more general theory of incentives (Posner, 1977; Gould, 1973) and consists of developing a single-person decision-making

([2]) See Barzel (1974), Cheung (1974).

process through a cost-benefit analysis. As consequence, Gravelle's argument would hold as long as any victim takes into account delay as a cost of filing a new dispute, so that the net benefit of filing should decrease as delay increases.

The main critic to Gravelle's argument can be conducted on the assumption that people (and therefore potential plaintiffs) are perfectly rational. In fact, it implies that they take delay into account as cost of proposing a new dispute. Such approach is an application to litigation (Shavell, 1982) of the more general theory of incentives (Posner, 1977; Gould, 1973) and consists of developing a single-person decision-making process through a cost-benefit analysis. As consequence, Gravelle's argument would hold as long as any victim takes into account delay as a cost of filing a new dispute, so that the net benefit of filing should decrease as delay increases.

By contrast, what usually comes out from empirical evidence (not only in Italy but also elsewhere) is that the demand of justice goes up over time despite the high costs (also different from delaying) of filing. Obviously, the demand of justice is influenced by several factors, like population growth, the levels of care, the quality of laws, other social and economic factors and people habits. More precisely, there are sectors, like family or labour, in which such increase in the demand side is normally due, on one hand, to population growth and, on the others, to some changes in social habits recognised by laws, such as divorce and, more recently, mobbing. Whereas, there are other sectors, including those disputes regarding land, property and obligations, where the increase of the demand of justice, on one hand, should not be influenced by social or economic changes and, on the other hand, can be just in part explained in terms of population growth. Rather, we argue that specially in these sectors plaintiffs are not fully informed of the true cost (including delay) of proposing a dispute. About that, the main problem is represented by the fact that since people on average have no technical skill to value their probability of winning a dispute, they cannot rationally form their own demand by themselves, but have to refer to an expert, the lawyer, who will really decide (or, at least, will influence client's decision of) whether to file a dispute or not.

Sobbrio-D'Agostino-Sironi (2009) has shown that lawyers significantly affect plaintiffs' decisions of proposing new disputes and above all that this effect is stronger in those districts where competition among lawyers is tougher.

What we plan to do in this paper is adapting Gravelle's argument to Italian judicial system in order to verify whether it works, in the sense that delay discourages potential plaintiffs from starting a new dispute. More precisely, we will take into account delay as possible explanation, in addition to lawyers and some other control variables, of demand of justice measured in terms of new disputes.

To do that, the role played by time becomes crucial for more than one reason. First, we have to consider that, if the demand of new disputes is fixed, delay at time t depends on delay at time t-1, t-2 and so on. In other words, it is straightforward to note that trial delay is a process that persists over time and may also depend on number of new trials that contribute to make court job slower. We solve such causality problem by accepting Gravelle's argument that requires the assumption that it is delay which should influence the number of new trials and not vice-versa.

About this point, it has to be said that there is no causality problem under the assumption of waiting lists used by Gravelle; in fact, in such a case, plaintiffs have not to spend any energy till to the time at which the dispute will arrive in front of the court. It therefore implies that neither courts are affected by those disputes already put in the list but not started yet in front of them.

Vice versa, the Italian system does not allow for waiting lists: once the plaintiff makes a statement of claim and gives the defendant notice of it, the trial is set up and starts its *iter* in front of a judge. It means that hearings are scheduled at the same time with oldest disputes, so that court job with respect of the last ones is negatively affected by the introduction of the new cases. It also implies that the plaintiff cannot properly quantify delay once he takes the decision of starting a new dispute.

We will therefore distinguish a short run effect from a long run effect. In other words, we will test Gravelle's argument and we regress number of new disputes in a given period of time on a measure of delay in periods $t-1,\ t-2$ in order to verify whether people care of delay and, if yes, whether they are myopic, in the sense that they care of delay characterizing close past periods only. In fact, given the different legal system and the absence of waiting lists, to be confirmed in the Italian context, Gravelle's argument requires that such correlation between the demand of justice and delay persists in the long run, that is people look at delay as long-run process.

It is under these different assumptions that we will test Gravelle's argument in the Italian system between 2001 and 2006. We will omit previous years at the moment because Italian justice has been characterised by an important reform in 1999 which has removed magistrates' courts assigning their competences to courts of justice. It has provoked significant effects in trial delay since a dispute to be proposed in front of a court of justice follows a longer and more formal *iter* with respect of those previously presented to magistrates.

Sobbrio-D'Agostino-Sironi (2009) has already shown that immediately after the reform the number of new disputes suddenly fell down and started increasing again after a while. However, such effect can be explained not only in terms of an increasing in delay with respect of previous regime; in fact, it has to be remember that trials in front of a court of justice are more expensive with respect of those previously held in front of magistrates. Then, using Gravelle's expression, the

reform has determined a rationing system which has worked using both delay and price at the same time. Therefore, it is difficult to isolate the two effects and to measure the impact of delay alone.

2. Data Gathering and Variables Description

In order to investigate a possible effect of delay on the number of new trials, the empirical analysis includes several variables:

- *The number of new legal disputes*; we use only data regarding the new civil legal disputes started in the observed year, falling within ordinary jurisdiction that are presented to inferior courts included in each province;
- The *average duration* of the civil trials specified above; in our analysis, following Gravelle's theory, duration appears as a lagged variable.
- The stock of *lawyers* operating in the market. We use Lawyers' Pension Fund dataset to take into account only those who really practise.
- An economic index: the *income per capita*.
- The *population* living in the territory.
- A proxy of crime regional level summarized by a variable that indicates the number of *people denounced* to the authorities.

All data different from those concerning the number of lawyers come from the Italian National Institute of Statistics. Finally, data regarding crime come from the "Rapporto sulla criminalità in Italia - Analisi, Prevenzione, Contrasto" (2007).

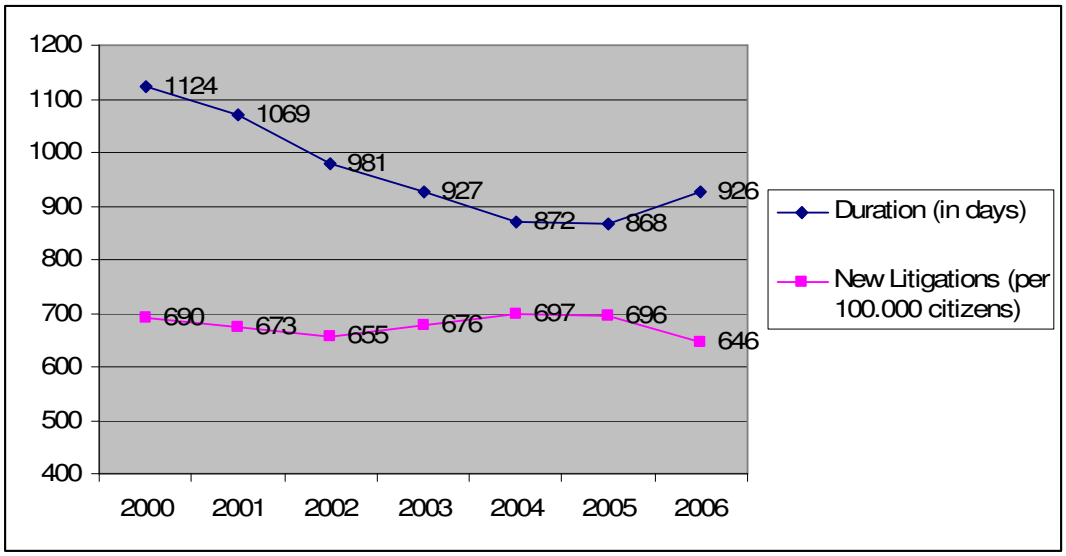
The dataset is in the form of panel with observations collected by year and province for the period 2000-2006([3]).

The aim of the paper is to investigate a possible correlation between duration and new legal disputes. Obviously duration is a direct consequence of pending litigations that are influenced by the legal disputes started in the same year. Gravelle's theory considers instead the problem of reverse causation. In this framework we want to investigate whether duration of legal disputes has any impact on the disputes started one or two years later. More in detail the question is: could a delay in past trials discourage citizens to start new legal proceedings? In his theory Gravelle gives a positive answer that we want to test with statistical methods for the Italian context.

The following graph displays the temporal evolution of the average duration of trials (in days) and the number of new legal disputes per 100.000 people by each year.

([3]) Due to the presence of lagged variables, we lose some of the years from the whole sample that reduce itself to the period between 2001-2006..

Graph 1: Evolution of new legal disputes per 100.000 citizens and average duration of trials between 2000 and 2006.



What emerges is that the number of new trials increases after 2002, whereas the trend of duration is regular and decreasing all over the time. A possible explanation of this evidence is given by the effects of the *single judge reform* enforced in June 1999. Indeed we distinguish three stages in the evolution of new litigations: in the first stage (1999-2000) the number of new trials was still increasing, because citizens probably believed that disputes would have been quicker after having rationed judicial officers. Then, people decided to reduce their demand of justice. After 2002, once this shock has been ridden out, new legal disputes have started increasing again. The effect of the rise of new legal disputes probably has caused an increase in the average duration in 2006.

The association between the constant decline of the duration of trials compared to the less regular trend of new legal proceedings does not allow us to answer to the question asked before; some confounding factors play a decisive role in the determination of the demand of justice; for example lawyers' interest is to encourage the clients to propose legal disputes more than necessary, even if the outcome is uncertain, in order to increase their outcome (see Sobbrio-D'Agostino-Sironi, 2009).

Also other factors may influence the rise of new disputes, like population growth, that is assumed to be proportional to new litigations. Also law quality can be a possible important factor but since it would apply to the whole territory it is not relevant in our analysis and has not been taken into account.

Moreover an index of economic development, like the income per capita, is included in the study and is supposed to have some effects to the attitude of citizens to start new litigations: the

greater is the economic well-being of citizens, the higher are the opportunities to pay a lawyer and legal expenses to defend their own interests.

Finally an indicator of the level of crime could be helpful to test whether there could be a relationship between civil and penal disputes in each province. In order to answers these questions and to identify the net effect of the duration of trials on new legal disputes we implement a linear regression that is described in next Section.

3. Methodological Issues

In this section we address the effect of the average duration of a trial in the year $t-1$ on the number of new legal disputes at the year t.

The model is specified as follows:

$$y_{it} = \alpha + X_{it}^{T}\beta + u_{it}$$

with *i* denoting the provinces and *t* denoting time. The *i* subscript denotes the cross section dimension, whereas *t* indicates the time series dimension of the panel. y_{it} is the dependent variable, X_{it} is the matrix of explanatory variables, β is the vector of parameters of interest, whereas α is a constant. In our setting we use a one way error component model for the disturbance:

$$u_{it} = \mu_i + \varepsilon_{it}$$

where μ_i denotes the unobservable individual specific effect and ε_{it} denotes the remainder disturbance. We propose two different kinds of model. In the first case μ_i is assumed to be a fixed parameter to be estimated and the remainder disturbance stochastic with ε_{it} independent and identically distributed with mean of 0 and variance equal to σ_{ε}^2. The X_{it} are supposed to be independent of the ε_{it} for all *i* and *t*. However in the fixed effect model the high number of specified parameters could produce a loss of degrees of freedom that can be avoided if we consider a random effect model instead of a fixed one. In this framework μ_i can be assumed as a random variable drawn by a distribution with mean equal to 0 and variance equal to σ_{μ}^2. After a comparison between fixed and random effects estimates a further topic is related to the choice of the more reliable model. The fixed versus random effects issue has generated a long debate in econometric literature; a specification test proposed by Hausman (1978), that is based on the difference between the two estimator can help us to make the right choice.

The dependent variable of the model is the number of new legal disputes at time *t*, whereas the covariates included in the model are: the average number of lawyers registered to the Fund in t, the income per capita at the year t, the average population between at the year t, the number of total people denounced to the authorities in t, temporal dummies (that are omitted in the outputs)

and finally the main regressor that is the average duration of trials in $t-1$. This model has been called *Lag1*; Afterward we have replaced the average duration of trials in $t-1$ with the duration in $t-2$, in order to test the long run affect of Gravelle's hypothesis. This last formulation of the regression has been called *Lag2* model.

4. Empirical Results

In this section we display the results of panel regressions, using random and fixed effects models. Each of this model is specified using separately both one period and two periods lagged variables for the average duration of disputes. All the models include temporal dummies that are omitted from the outputs, even if they are jointly significant at 1% level.

T*ab 1: Regression Results.*

	Lag 1		*Lag 2*	
	FE Model	*RE Model*	*FE Model*	*RE Model*
New legal disputes	*Parameter Estimates (Standard Errors)*			
Average duration (in days) of a trial $(t-1)$	-.415** (.183)	-.354* (.189)		
Average Duration (in days) of a Trial $(t-2)$			-.204 (.224)	-.091 (.218)
Lawyers registered to the Fund	1.106*** (.219)	.819*** (.139)	1.702*** (.299)	1.243*** (.169)
Population	-.016*** (.003)	.006*** (.000)	-.024*** (.004)	.005*** (.001)
People denounced to the authorities	.002 (.006)	-.011** (.004)	.011 (.008)	-.007 (.004)
Income per capita	-.003 (.057)	-.009 (.025)	.047 (.089)	-.000 (.027)
Constant	12430.15*** (2191.99)	341.9261 (582.753)	14699*** (2874.59)	-30.615 (650.106)
Number of observations	618	618	515	515
Overall significance([4])	6.09***	1840.15***	5.91***	1793.13***
Within R squared	0.09	0.03	0.11	0.03
Between R squared	0.86	0.92	0.86	0.94
Overall R squared	0.85	0.91	0.85	0.92
Corr $(\mu_{it}; X_{it})$([5])	-0.98	0	-0.99	0
σ_μ	14050.86	1128.75	17919.23	1148.46
σ_ε	631.87	631.87	666.11	666.11
ρ	.99	.76	.99	.74
Hausman Test	122.01***		98.53***	

*** indicates significance at 1% level, ** indicates significance at 5% level,

* indicates significance at 10% level (marginal significance).

([4]) The overall significance test used in FE is a F Test , whereas in RE model we implemented a Wald Test.

([5]) *Corr* $(\mu_{it}; X_{it})$ is zero by definition in RE models.

As Table 1 shows, Hausman test drives us to prefer fixed effect results for both *Lag 1* and *Lag 2* models, even if there are no substantial differences in results. What emerges from the data analysis is that the average duration of trials is negatively correlated with new legal disputes started the year after (in random effect model the coefficient is only marginally significant). In other words the greater the average duration of a trial at time $t-1$ the smaller is the number of new litigations in *t*. Such evidence changes when we consider the impact of the average duration of a trial at time $t-2$ on the legal disputes started in t; indeed the coefficient decreases its size and loses its significance. The result shows that delay affects individuals' behaviour only in a short-run process and they seem to be myopic in not considering its effect in a long-run perspective. This finding undermines Gravelle's argument, especially in a context characterised by the absence of waiting lists in rationing the juridical system.

Focusing on the other covariates, lawyers registered to the Fund seem to have a positive and highly significant impact on the number of new litigations. This finding confirms the results obtained with OLS and IV approach in Sobbrio-D'Agostino-Sironi (2009) for all the specifications of the model; a high density of lawyers leads to an uncontrolled rise of the demand of justice over a rational level, because they are able to attract potential clients. Indeed the Italian system adopts a rule that the losing party has to pay not only his own expenses but also the winning party's legal expenses, including the lawyers' fee; clients, in general, have no technical skills to evaluate their probability of winning or losing a dispute; thus lawyers may encourage potential clients to start a dispute even if they know that the outcome is uncertain and also when they have a low winning probability.

The results regarding the impact of population is instead controversial. On one hand random effects models show, as expected, a positive value for the coefficient; on the other hand fixed effects estimates invert the sign of the parameter. A possible explanation of this result could be given by the presence of provincial dummies that incorporate the effect of dimension of each province on the number of new legal disputes.

Surprisingly the number of people denounced to the authorities is significantly and negatively correlated with the number of new litigations, even if the result emerges only from the random effect model in *Lag1* formulation. Hausman test stated that *RE* estimates are not consistent and this evidence allows us to not consider the significance of the coefficient. In conclusion the level of the crime seems to be uncorrelated with the outcome. This underlines that in provinces with an higher level of criminality, the civil disputes are not necessarily more frequent. Also the results of the coefficient concerning the income per capita denies a possible connection between the provincial economic well-being and the attitude toward a greater use of civil justice to defend citizen's rights.

The coefficient is not significantly correlated to the outcome for each of the four models examined in this section.

5. Conclusions

The analysis has taken in consideration the Gravelle's theory regarding the effect of delay on pre-dispute decisions of parties; delay in courts' decisions increases the expected costs of leading legal disputes and discourages individuals to start new ones. This means that, according to the consequence of Gravelle's argument, the greater the delay in past disputes the stronger the disincentive is to propose new trials, especially in presence of the chance of a pre-dispute agreement between the parties, without complaining the judicial system. In this framework delay works as a constrain measure of the excess of demand characterizing the judicial system. In our analysis we have taken into account the situation in Italian inferior Courts between 2001 and 2006, immediately after the enforcement of the *single judge reform*, which has rationed judicial offices through the introduction of peace judges. In the sampled period, characterized by homogeneity of rules for the judicial system and of identical typology of legal disputes collected by the National Institute of Statistics, it has been possible to test the Gravelle's hypothesis distinguishing between a short-run and long-run effect of delay on the proposition of new legal proceedings. The short-run effect has tested a possible impact on the new trials of the average duration of litigations one year before, whereas the long-run effect considers the impact of the duration two years before.

Results of our analysis show a negative short-run impact of delay on new legal disputes according to Gravelle's theory. By contrast, they do not confirm such relationship in the long run.

Considering that Italy has not a legal system based on waiting lists, Gravelle's argument would require that correlation between duration and new litigations persists in long-run individuals' decisions; delay in Italy is indeed a long-process that is slowly decreasing in the last five years. We may conclude that long-run persistence of individuals' cognition of the delay in reducing new disputes is not supported by the data.

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