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Evaluation indices of the judicial system and ICT developments in civil procedure

Carlo Cusatelli^{a*}, Massimiliano Giacalone^b^a *Jonico Department, University of Bari "Aldo Moro", Via Duomo, 259, Taranto - 74123, Italy*^b *Forlì Campus, University of Bologna "Alma Mater Studiorum", Piazzale della Vittoria, 15, Forlì - 47121, Italy*

Abstract

The reform that by Presidential Decree (13th February 2001, n. 123) introduced "telematics civil procedure" in Italian judicial system has the objective of a more efficient and rapid justice. The combination of justice and Information and Communications Technology is now a path to be not only in terms of functionality and cost management, but also to adjust the Italian quality standards respect to the other European states: it is shown telematics civil procedure in its architecture, in its draft implementation and benefits arising from its actual use. From the statistical point of view as an indirect measure of the judiciary evaluation, we analyze the indices of average length in the various proceedings, as the main tool for assessing the efficiency court, noting the repeated condemnations against the Italian state, by the European Court of Human Rights, for failure to comply with the principle of reasonable duration of the process, a further confirmation of the unfortunate situation that our country is facing on the topic of judicial authority.

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1. Introduction

Efficient judicial systems are an important factor of economic growth: the adequate protection of property rights encourages saving and investment, ensuring certainty of returns resulting from these activities; effective contract enforcement promotes the expansion of trade, discouraging opportunistic behavior and reducing transaction costs. In

* Corresponding author. Tel.: +39-348-723-7133; fax: +39-080-214-2582.

E-mail address: carlo.cusatelli@uniba.it

some Countries the duration of proceedings is very high, with significant costs for businesses, reducing confidence in the judicial system (Vellani, 2007): OECD estimates suggest that a 10 percent increase in the duration of proceedings is associated with about 2 percentage points of reduction in the probability that a person claims to have confidence in the judicial system. The average duration of proceedings is lower and productivity of judges is higher in Countries that spend a larger share of the budget of justice for computerization (MIPA, 2004). The relationship between such investment and productivity is stronger when the level of computer skills in the population is higher and therefore there is a greater ability to take advantage of new technological instruments: policies aimed at increasing the level of computer skills in population appear thus necessary.

Technology has long since become part of the civil trial and presentation of acts or facts could be precisely even informatics: telematics civil procedure (TCP) is the set of rules, procedures of law and information & communications technology (ICT), for the computerization of the civil trial. It works particularly with the combination of documents submission and telecommunication services. Conducting TCP focuses mainly linking the flow of information and documents between external users (lawyers), auxiliaries of the judge and judicial offices. The objective of the TCP is to replace the hard copy with the electronic file through construction and updating of interchangeable databases, and technically the TCP is defined as the integral management, integrated documentation in digital form and electronically. That's for:

- management in digital, efficient and safe form for all acts of civil trial
- management in electronic form of the information exchange between lawyers and the auxiliaries to decrease in cost and time of the bureaucracy
- simplification of procedural activities to a greater integration and transparency

The TCP has been structured in stages and involves seven “pilot” locations which are the following courts: Bari, Bergamo, Bologna, Catania, Genoa, Lamezia Terme, Padua. For each place was set up a laboratory for experimentation composed of lawyers, judges, court clerks and computer experts, as their first job was structured through a micro-analysis to gain a shared vision and in particular to develop competitive strategies for the implementation of the TCP (Amendolagine, 2012). This way of structuring the process is said “bottom-up”, namely starting from the experience of individual users, with the aim of centralizing solutions closer to their needs and, in particular, allows to use all their know-how to study effective and really useful solutions on a practical level.

2. Evaluation indices of the judicial system

The length of proceedings can be viewed as the result of the interaction between demand and supply of justice. On the supply side, the most significant factors are: quantity and quality of available financial and human resources, organizational and governance structures of the courts, incentives of the involved parties (judges and administrative staff), efficiency in use of the resources: the latter may be influenced by the level of specialization, the dissemination of techniques for managing of flows, or the level of offices computerization. Factors that influence the demand for justice are: the cost of access to the system and the rules for the allocation of costs between the parties, the incentives of the professionals, the spread of alternative mechanisms for dispute resolution, the quality of legislation and the degree of legal certainty.

Although there are exceptions (especially Slovenia and Japan), systems with longer duration of the processes tend to be more expensive (Fig. 1). Trial length is estimated with a formula commonly used in the literature (Cusatelli, 2011; Giacalone, 2009): $(\text{Pending}_{t-1} + \text{Pending}_t) / (\text{Incoming}_t + \text{Resolved}_t)$; the total private cost of trial is discounted by the expected probability of receiving legal aid. The cost of trial (as a percentage of the value of the claim, which is assumed to be equivalent to 200% of income per capita in the country) is taken from the World Bank Doing Business database and encompasses three different types of costs necessary to resolve a specific commercial dispute: court fees, enforcement costs and average lawyers' fees. The reduced number of observations is due to data availability.

The costs of access to justice - measured as an estimate of the costs that an entity must incur to get to the resolution of a particular dispute (administrative costs, compensation for experts and lawyers) net of government grant (legal aid state) - vary significantly between Countries. In Italy the normal procedural time, with two

investigative hearings, could permit the conclusion of a civil trial in about 460 days (15 months), however this is not possible for the overload of roles and judges: in front of a public expenditure in line with international averages, in Italy there is about 50% less judges and administrative staff but, before the recent mergers, 21% more courts. Public spending on civil justice is € 3,051,375,987, equal to 0.20% of total public expenditure and slightly below the EU average of 0.24%. In contrast, Treasury collects, through the unified contribution, only 10.7% of public spending on civil justice, against a European average of 28.3%.

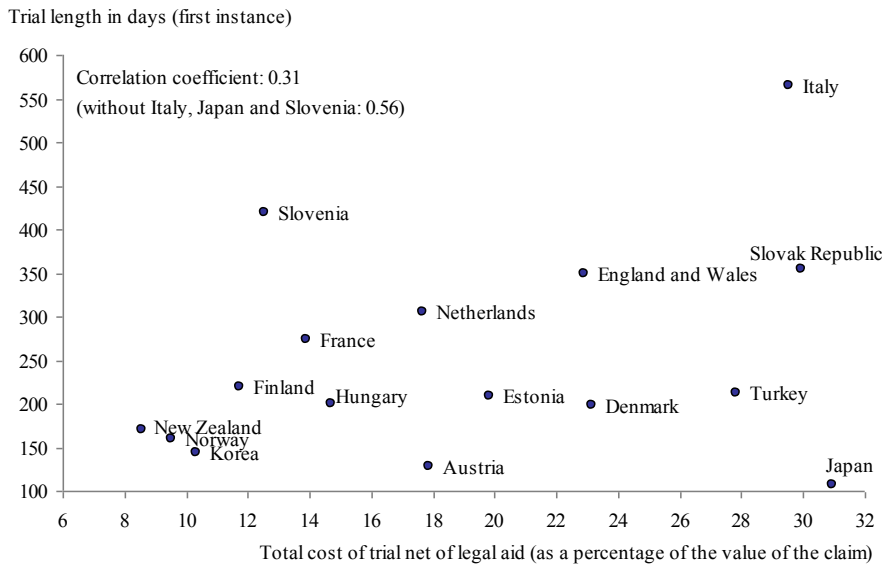


Figure 1. Distribution of Countries according to trial length in first instance by cost of trial, OECD (2013).

International comparisons - albeit with caution due to differences in legal systems and the organization of the judicial statistics in different Countries - show a wide variability in the length of the proceedings (CEPEJ, 2012). In 2010, the estimated average duration of civil proceedings at first instance was about 240 days in OECD Countries, 107 in Japan (the Country with the shorter duration), about 420 in Portugal and Slovenia, 564 in Italy (the Country with the longest duration). The estimated average time to completion of a proceeding in three levels of instance was 788 days, with a minimum of 368 in Switzerland and a maximum of almost 8 years in Italy (Figure 2).

The crisis of justice also costs in economic terms: not surprisingly, the World Bank also took care of the situation by calculating in its “Doing Business 2013” report that in Italy (Tab. 1), after a record 41 steps in the procedure, 1,210 days are needed to protect a contract, 692 days longer (almost two years) than the average of high income OECD Countries, placing Italy in the 160th place in the ranking of “enforcing contracts”, with a cost equal to 29.9% of contract credit (by way of comparison, the resolution of a dispute represents 9.7 % of the value of the dispute in Luxembourg, 14.4% in Germany and 17.4 % in France).

In the EU, public spending accounts for nearly 50% of GDP and the public sector contributes approximately 17% of total employment. Over the years, many Member States have taken steps to improve, on the one hand, the efficiency of public services and, on the other side, the transparency and quality of public administration and the judiciary in particular, improving quality, independence and efficiency of judicial systems, ensuring the conclusion of proceedings within a reasonable time and promoting the use of alternative mechanisms for dispute resolution.

In order to put a stop to all of this, since many years one of the main challenges is to use the web to facilitate transactions and exchange of information between judicial offices and users. ICT promises to transform the justice - and more generally the public sector - increasing the capacity to act effectively, efficiently, transparently and in line with the expectations of the users.

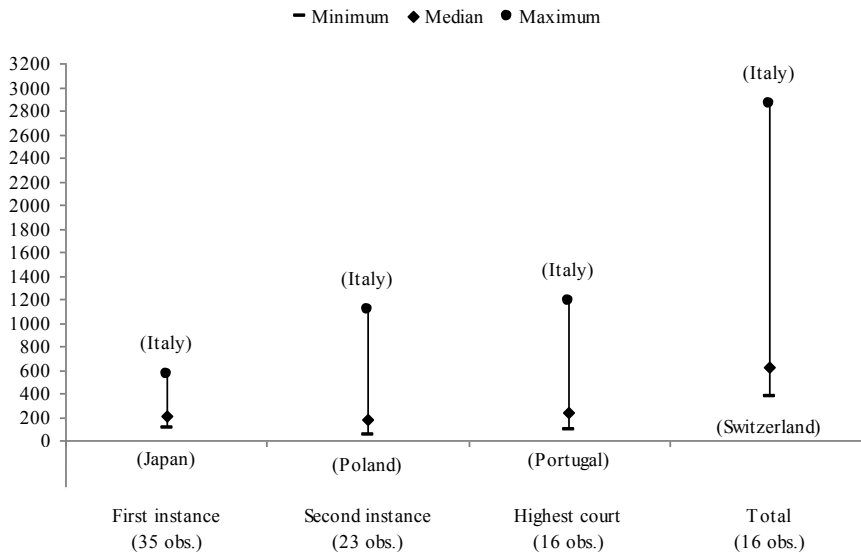


Figure 2. Distribution of trial length (in days) across Countries by type of instance, OECD (2013).

3. The TCP state of progress

The Italian “stability” Law n. 228 of 24th December 2012 provides that from 30th June 2014 in civil proceedings, of litigation or voluntary jurisdiction, the filing of pleadings and documents from the defenders of the parts will be held exclusively by electronic means. TCP is the electronic project of the Ministry of Justice that aims, therefore, to automate information and document flows between external users (lawyers and auxiliary judge) and judicial offices allowing to: prepare, sign and file documents; consult the files directly from their desktop; consult the registers; receive communications from the judicial offices; make payments electronically. The TCP allows the efficiency of staff, but more importantly can lead to the reduction of the huge amount, also for environmental purposes, of paper handled and deposited in the courts, and thus reduce the costs related to the occupied physical space. In addition, the efficiency of the process could increase significantly, with consequent savings in time and costs for all parties involved, and ultimately for the community. Consider, for example, that the activity of the case can not proceed until the notification is completed. The relief work would shift some of bailiffs employed for the notifications, on the front of the executions. This set of measures aims to rationalize and streamline processes, to achieve progressive savings and mitigate the consequences of judicial geography review, where major organizational problems are added with the implementation of the reform on the unification of the lower courts and removal of section offices, especially for the databases merging of the various courts.

The project was divided in three phases. In the first (1.0 version) it was possible to draw up and sign the act of a party, deposit the instrument into court (in order to receive the time certification and the receipt by the office itself), to consult the concerned dossiers via internet by the “platform” (or “console”), and receive communication of the court in certified mailbox. The second phase (2.0 version of the project) has allowed the extension of the structure of the labor law and the realization of the magistrate console, i.e. a software that allows the use of an agenda, the management of the hearings and the production of the measures in electronic form. The last phase includes the installation and startup of the TCP to over 50 locations and the training to all participating users.

The electronic filing of documents by lawyers and professionals in the two-year period 2012-2013 is quantified in Tab. 2, together with computerized communications, and the estimate of its cost savings.

Currently, there are about 1,000,000 hits per day to the civil registers of all courts, court of appeals and justices of peace, of which about 368,000 of registered professionals (lawyers are approximately 280,000). Between the whole of the first 8 months of 2012 series available and the complex of the analogous last 8 months of the 2013 series available you may notice an increase of 104.9% of telematics deposits, riding a year were 286,649 (sum from

November 2012 to October 2013). Starting from November 2011, with the introduction of certified electronic mail were delivered almost 20 millions of communications and telematics notifications; from 15th October 2012 telecommunication services have been activated in any court, also of appeal: the trend data for the last 14 months available is shown in Table 1. The unit cost of a communication is estimated at around € 7, loosely and paying particular attention to the cost of the postal service and the average cost of the actions of the bailiff, and is applied as a precaution to 50% of telematics communication delivered, obtaining the savings indicated in the table. Over the past 12 months it is therefore estimated savings of € 42,501,858, being able to imagine, therefore, at operating speed, annual savings of far beyond € 40 millions for the sole burden of notification.

Table 1. World Bank's "Doing business 2013" rankings of high income OECD Countries.

Economy	Ease of Doing Business (overall rank)	Enforcing contracts			
		Rank	Time (days)	Cost (% of claim)	Procedures (number)
New Zealand	3	17	216	27.2	30
United States	4	6	370	14.4	32
Denmark	5	34	410	23.3	35
Norway	6	4	280	9.9	34
United Kingdom	7	21	399	25.9	28
Korea, Rep.	8	2	230	10.3	33
Australia	10	15	395	21.8	28
Finland	11	9	375	13.3	33
Sweden	13	27	314	31.2	30
Iceland	14	3	417	8.2	27
Ireland	15	63	650	26.9	21
Canada	17	62	570	22.3	36
Germany	20	5	394	14.4	30
Estonia	21	31	425	22.3	35
Japan	24	35	360	32.2	30
Switzerland	28	20	390	24	32
Austria	29	7	397	18	25
Portugal	30	22	547	13	32
Netherlands	31	32	514	23.9	26
Belgium	33	18	505	17.7	26
France	34	8	390	17.4	29
Slovenia	35	56	1,290	12.7	32
Israel	38	94	890	25.3	35
Spain	44	64	510	17.2	40
Slovak Republic	46	69	545	30	32
Hungary	54	16	395	15	35
Poland	55	56	685	19	33
Luxembourg	56	1	321	9.7	26
Czech Republic	65	79	611	33	27
Italy	73	160	1,210	29.9	41
Greece	78	87	819	14.4	39

Source: <http://www.doingbusiness.org/custom-query>

Table 2. Number of filings of civil acts and electronic communications, and related savings.

Month	2012			Month	2013		
	Filings	Communications	Savings €		Filings	Communications	Savings €
March	13,778	-	-	January	17,994	1,006,941	3,524,293.50
April	11,129	-	-	February	21,883	1,086,419	3,802,466.50
May	14,169	-	-	March	26,110	1,212,641	4,244,243.50
June	13,751	-	-	April	26,836	1,149,872	4,024,552.00
July	14,066	-	-	May	32,283	1,319,587	4,618,554.50
August	6,328	-	-	June	28,169	1,162,445	4,068,557.50
September	13,017	586,879	2,054,076.50	July	35,091	1,225,116	4,287,906.00
October	19,755	1,012,657	3,544,299.50	August	11,557	429,049	1,501,671.50
November	17,571	972,554	3,403,939.00	September	15,416	537,759	1,882,156.50
December	13,714	812,791	2,844,768.50	October	40,025	1,228,214	4,298,749.00

Source: http://pst.giustizia.it/PST/it/pst_26.wp

Considering the attitude of computerization (which in 2013 led Italian Districts of Appeals Court to the situation of Tab. 3 relative to activation of the TCP in domestic courts) as an independent proxy of judicial efficiency in terms of proceedings length (which appeared in 2011 as in Tab. 3), the linear regression coefficient between percentage of active courts regarding PCT and average length of civil proceedings held in court is equal to -1.73 (with a determination coefficient of 10.3%), which means that increasing computerization of one percentage point, civil proceedings are shortened on average of almost two days, although with great variability between districts. But considering the absolute number of courts active in computer terms as independent variable, the regression coefficient becomes -36.7 (with a determination coefficient of 67.0%): that is, one more computerized court contributes in speeding up civil proceedings five weeks, and now with limited variability among the Districts of Appeals Court. Being just interested in the impact of ICT on the length of the proceedings, the model don't include other predictor variables like lawsuit typology, average time interval between the day of hearing for the closing of the preliminary investigation and the day of hearing for the specification of the conclusions, number of all-out strike days for the several courts, number of the staff of each court. The strong drive for innovation of the judicial system is based on three key moments: the introduction of technology, which is able to streamline all the procedures for which it is required discretion of the court; a legal system that is capable of facilitate the availability of regulatory instruments flexible and capable of adapting to continuous stress; the internal structure of an organization is able to exploit its possibilities. This has been pursued with approaches related to the idea of cultivation, a method of development of complex systems based on local planning interventions aimed at conversion, adaptation and connection of systems, components and functionality already available in part for the purpose of assembling configurations system can then be put to the next test. This has allowed, for example, to achieve in a relatively simple application that would facilitate access to information on the procedures provided by the courts to interested parties or to exchange data necessary for the definition of cases.

The many reasons for the delay in the full use of ICT will include: unwillingness to change habits, cultural skepticism, fear about the reliability of the instruments used, the objective difficulty and complexity of techniques and practices in the use of concrete tools and ICT services (Carnevali, 2010). One of the characteristics of the locations where the PCT started has been the search for synergies between locally based staff and judges of the courts and lawyers - not excluding the contribution of other stakeholders, such as banks, professional bodies, local authorities - to solve the problems, organize procedures, create ultimately a culture of computing for the search of a new efficiency (Aprile, 2011). For their part, the judges are better able to get a support structure (databases and filing of judgments even local) that will not only be adequate aid to decision-making in qualitative terms, but even a solution to the excessive pending load which they face daily.

The implementation of the new system, making significant improvements to the judicial services, will allow the execution of the filing of documents, the transmission of notifications and communications, the consultation of the state of the processes, of files and measures of the Judge, with the simple use of electronic means. Not to mention,

then, of the benefits that will affect all the protagonists of Justice: with the implementation of electronic civil trial, the lawyers will be able to file court documents and monitor the conduct of proceedings with a simple “click” without having to access physically the Chanceries of the Courts, avoiding queues, delays, search through the shelves of files, etc. (Aubyn, 2008). With the process virtualization, also the staff of the Registry may devote themselves to the most qualified assistance to the jurisdiction and not exclusively to the management of files. For years, lawyers are forced to support the judge in the transcript of the hearing, despite being a typical act of the Registrar. In addition, the electronic system will be made available all the information about pending cases, allowing to process them and treat them immediately, according to the needs of legal practitioners.

Table 3. Data needed to calculate linear regression between duration of civil process and TCP activation in the courts of Italian Appeals Districts.

District	2011					2013		
	Initial pendings	Recorded	Defined	Final pendings	Avarage duration (days)	Active courts	Total courts	% active courts
Ancona	66,286	64,700	67,461	63,525	359	6	6	100.0
Bari	361,189	118,167	136,422	342,934	1,009	2	3	66.7
Bologna	145,081	156,663	160,395	141,349	330	9	9	100.0
Brescia	85,748	100,742	98,227	88,263	319	4	4	100.0
Cagliari	85,952	70,351	64,324	91,979	482	0	6	0.0
Caltanissetta	24,659	15,609	14,896	25,372	599	1	3	33.3
Campobasso	17,321	14,788	13,222	18,887	472	1	3	33.3
Catania	131,927	88,348	81,985	138,290	579	4	4	100.0
Catanzaro	168,769	81,242	79,272	170,739	772	0	7	0.0
Firenze	156,428	153,657	149,883	160,202	381	6	9	66.7
Genova	77,247	76,090	76,834	76,503	367	5	5	100.0
L'Aquila	70,290	59,517	58,754	71,053	436	7	8	87.5
Lecce	182,777	85,966	106,938	161,805	652	0	3	0.0
Messina	99,037	36,215	37,324	97,928	978	3	3	100.0
Milano	213,417	271,347	269,344	215,420	289	9	9	100.0
Napoli	454,466	301,985	307,052	449,399	542	1	7	14.3
Palermo	110,803	93,841	89,104	115,540	452	6	6	100.0
Perugia	43,137	35,366	35,784	42,719	440	3	3	100.0
Potenza	52,993	22,565	22,757	52,801	852	1	3	33.3
Reggio Calabria	68,009	36,174	37,341	66,842	670	0	3	0.0
Roma	390,585	326,277	333,126	383,736	429	3	9	33.3
Salerno	139,510	70,559	64,295	145,774	772	0	3	0.0
Torino	122,159	167,358	167,464	122,053	266	10	10	100.0
Trento	20,402	32,631	32,756	20,277	227	1	3	33.3
Trieste	33,012	44,224	45,146	32,090	266	2	4	50.0
Venezia	155,454	154,166	152,638	156,982	372	2	7	28.6
Total	3,476,658	2,678,548	2,702,744	3,452,462	470	85	140	60.7

Source: <http://webstat.giustizia.it/AreaPubblica/default.aspx#> - http://pst.giustizia.it/PST/it/pst_26.wp

Statistics do not represent the only source of information through which to monitor the operation of the judicial administration (Fabri, 2006). Judgments and orders contain a surprising amount of data that, if properly extracted and organized, can provide various analytical information, for example on legal guidelines. Automatically extract

the information contained in the text of the judgments, relate them to other sources to verify the consistency of evidence or inferred investigative activities is another area that has long interested legal practitioners. This involves developing systems for semantic-based information extraction, developing and disseminating technologies, reducing the cost and time of work, and indirectly, by allowing to implement “caseflow management” techniques and ensuring more and better supervision and management of workflows designed to ensure a rational trend (Kessler and Rubinfeld, 2004). Some examples are the establishment and management of deadlines, the prior examination of the processes incoming and assignment procedures to differentiated proceedings according to their characteristics, the early identification and management of more complex and potentially more problematic cases, associated with minor durations in procedures. The availability of information on flows, durations, work load and other operational dimensions is a necessary condition for the scheduling of work within the offices and for the subsequent verification of the results, to evaluate the performance of judges and administrative staff.

4. Final remarks

The fundamental aspect of public administration’s information systems is to be tools created for improving services and supporting knowledge and information of public decisions. In particular the TCP then comes from the need to combine new information and communication technologies with judicial organization and procedural rules, creating a dedicated console for institutional bodies in order to carry out civil trials by computer. The proposed measures are thereby responding to the need to accelerate the civil justice system and avoid further condemnation of the European Court of Justice for breach of the reasonable duration of the process, and to enable a revival of Italy competitiveness, helping to reduce costs for businesses and to make the Country more attractive to foreign investors.

Finally, the length of proceedings is associated with the composition of public spending for justice and some characteristics of the organization and governance of the judicial offices: efficiency gains can result from policies aimed at reducing the rates of litigation. In this regard, and finally, there is scope to reduce the rates of appeal, an approximate measure of the degree of predictability of judicial decisions. In conclusion, the rapid development of information and communications technologies has opened new opportunities for significantly improving the administration of justice, with the availability of web services, the use of electronic filing, the electronic exchange of legal documents, the opportunity to consult the laws and jurisprudence on-line: ICT can therefore be used to improve efficiency, access, timeliness and transparency, helping the judicial authorities to provide adequate services.

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