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# When Justice Lags: Civic Engagement, Deprivation, and Institutional Performance

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#### **Abstract**

The socio-economic and institutional factors explaining the length of civil proceedings (LCP) over the 2004-2022 time frame are analyzed here in 20 Italian regions. Adopting panel data analysis approaches, such as fixed-effects, random-effects, and two-stage least squares (2SLS) instrumental variables, the analysis investigates the effects of income inequality, material poverty, labor market disengagement, economic family distress, civic and political participation, and non-profit density on trial length. Results identify a significant positive association between net income inequality, intensity of work poverty, deterioration of household economic conditions, and civic and political participation and an increased length of proceedings. The findings suggest that structural socio-economic vulnerability and increased legal demand in civically active regions are factors prolonging proceedings. In contrast, non-profit density is strongly and inversely associated with trial length, suggesting their effectiveness in promoting institutional efficiency. Instrumental variables sourced in environmental, infrastructural, and sustainability indicators provide assurance of the robustness of these associations. The research stresses that legal inefficiencies are not peculiar exceptions but are part of deeply embedded and intricate systems of the wider society, economy, and the natural environment. Policy conclusions point to the necessity of integrated governance responses that interlink legal reform with social equity, civic empowerment, and environmental resilience to promote both the timeliness of justice and institutional accountability in regional settings.

Keywords: Civil Proceedings Duration, Income Inequality, Socioeconomic Deprivation, Civic Engagement, Institutional Efficiency.

JEL Codes: K40, K41, I38, O43, R23.

#### 1) Introduction

Justice is not just a legal concept codified in formal norms and procedures, but rather a basic public service that should be efficiently administered in order to ensure public confidence in institutions and respect for the rights of citizens. In civil law, the efficiency of proceedings is a key to ensuring that justice is effectively administered. Delay in civil litigation not only lessens the utility of legal results but incurs considerable costs—economic, psychological, and social—upon participants. Italy is a

prime case in point where legal delay is a salient issue, with its civil courts known to feature chronic, well-documented instances of slow proceedings, particularly in the south of the country. Reforms have tried to rationalize procedures and dispose of arrears, but to a large extent, literature has been preoccupied with internal-court dynamics, administrative processes, and judicial efficiency in procedural terms. Less attention has been paid to the role of wider socio-economic factors in shaping the length of civil proceedings. This research redresses the omission by concentrating on the extent to which regional variations in incomes distribution, poverty, conditions in the labor market, economic distress in the household, civic conduct, and civil society action are able to account for trial length variations in Italy's regions over an eighteen-year span.

Placing the analysis within the tradition of law and economics, this study draws upon the assumption that institutions operate in a real economic and social context. Legal procedures, and especially civil ones, are integrated in and determined by the nature of the communities that serve them. Income inequality regions, for instance, will see more disputes over property, contracts, and entitlements. Such contexts will create a heavier and more complicated caseload, thus a longer time for litigation. Inequality may also affect legal representation and the quality of legal services afforded, causing asymmetries of dispute settlement and longer proceedings. Equitable regions, by contrast, enjoy more procedural simplicity and more robust informal channels of conflict avoidance, alleviating the burden of courts.

The situation of poverty and economic hardship is equally pertinent. Extremes of material hardship, determined by outright inabilities to obtain basic goods and services, can enhance both demand for civil justice and the vulnerability of parties. Legal disputes over eviction, debt collection, entitlement to means-tested welfare benefits, or labor concerns are more likely to multiply in financially weak areas. But these are the very areas where institutions are weakest and where public legal aid is underfunded or saturated. High demand and low institutional responsiveness make a recipe for legal delay. In addition, the prevalence of low work intensity—measured by a low rate of working-age household members holding gainful employment—represents not only exclusion in the labor market but also reduced capability to use legal processes. Those with precarious or informal work arrangements may not even have the time or means to seek effective legal relief, with the consequence of increased default, longer settlement periods, or missed hearings that prolong settlement.

Self-reported economic deterioration of households, a subjective measure that indicates more than static measures of income, is another factor considered in this analysis. When households feel their financial situation to be worsening, they can be more likely to seek civil claims to recover lost assets, to enforce contracts, or to obtain compensatory judgements. This surge in legal mobilization can be too much to be absorbed by regional court systems, especially where there are already high baseline caseloads. Such economic pressures are no mere correlates of legal delay; instead, they react cumulatively with institutional performance and feed back to entrench inefficiency. For example, slow judgements in cases where there are maintenance or tenancy conflicts can propel hard-pressed families down the spiral of further economic insecurity, enhancing their dependence upon either state or charitable support systems and stimulating additional demand upon judicial intervention.

A highly innovative element of this research is that it considers civic and political engagement as a predictor of civil trial length. Greater levels of citizenship engagement—measured in terms of public discussion, political action, or online petitions—are generally considered to be predictors of democratic health. In civil litigation, however, they could be a sign that people are more likely to seek legal recourse to resolve conflicts. In more participatory areas, people are likely to sue more than to accept informal or extrajudicial rulings. This heightened demand placed upon adjudication could unintentionally result in delays, where there are established or limited capacity within the judiciary. What seems to be civil virtue could be a source of procedural burden under some institutional configurations.

On the contrary, non-profit presence—utilized here as a proxy measure of civil society infrastructure—has a significant negative correlation with trial length. This indicates that robust local networks of legal aid actors, such as advocates and community groups, help resolve conflicts more effectively. Such actors can act as a key intermediate by providing legal counsel, promoting alternative dispute settlement, or assisting litigants with intricate procedures. Such activities reduce the rate of frivolous claims and help parties resolve disputes at a more accelerated pace or provide logistical and informational assistance that accelerates case management. In this sense, civil society serves as a supplementary institutional level that assists with the effective workings of the legal system, especially where informal state capability is weak.

Methodologically, the research leverages the use of fixed-effects and instrumental variable estimations to analyze panel data that extends over the period between 2004 and 2022. The use of panel data allows within-region effects to be isolated, controlling over unobserved heterogeneity that would otherwise skew findings. The inclusion of instrumental variables reinforces causal inference by controlling over the potential endogeneity of the main regressors, be they income inequality or participation in citizenship. This increases the robustness of findings and allows a more nuanced appreciation of the forces in play.

Compared to prior studies that have a tendency to focus on internal judicial measures such as caseload-to-judge, clearance rate, or procedural complexity, this paper has a more general socioeconomic approach grounded in law and economics. It argues that trial length is not just a matter of courthouse efficiency but a result of the interdependent effect of individual behavior, household conditions, and regional structural factors. The study emphasizes that legal delay reduction cannot be attained if only targeted at administrative reform. Instead, policy measures have to be integrated, taking basic economic imbalances, promoting labor market integration, and enabling civil society development into account.

The research contributes to the law and economics literature by documenting the structural socio-economic factors that influence the functioning of civil justice systems. By focusing on regional heterogeneity in Italy, the research emphasizes the necessity of contextual legal reform. The results provide evidence to suggest that efficiency in courts is not just a matter of more judges and faster equipment but is directly dependent upon the improvement of the socio-economic context underpinning courts. Last but not least, the research refutes the assumption that legal delay is fundamentally a technical matter, instead demonstrating that legal delay is embedded very deep within the economic and institutional fabric of society.

The article continues as follows: the second section presents the literature review, the third section presents the data and methodology, the fourth section presents the econometric analysis, the fifth section presents the policy implications, the sixth section concludes.

## 2) Literature review

The inter-relationship of socio-economic inequality and judicial efficacy, at the heart of this research inquiry into Italian civil justice delay, rings true elsewhere in a diverse literature. Cannon (2021) highlights the pivotal significance of legal access to promoting health equity, underlining that structural inequities in just systems are analogously a reflection of wider socio-economic barriers to flourishing—a theme at the heart of this research inquiry into the extension of trial length by deprivation and inequality. Leung, Hepburn, and Desmond (2021) offer empirical evidence of civil courts, via devices like serial eviction filings, becoming instruments of exclusion and displacement, reflecting this research's conclusion that litigation patterns are influenced by regional economic vulnerability. In similar fashion, Melcarne and Ramello (2021) conduct a direct examination of the Italian situation and demonstrate that process inefficiencies in the legal system reflect underlying

institutional malfunctions—findings your research extends with a multi-faceted socio-economic panel analysis. The echoed title in Liu, Anser, and Zaman (2021)—"justice delayed, justice denied"—calls to attention the manners in which failure of the justice system is complicit with ecological and gendered inequality, and that an explanation of institutional delay should be holistic in nature, adumbrating your research's inquiry via the nexus of poverty, civic participation, and labor exclusion. Contexts that are historical, such as the socioeconomic impacts of drought in Ming dynasty China presented by Han and Yang (2021), demonstrate that institutional capacity under duress has long influenced distributive effects—the parallel your research makes that legal inefficiencies today perpetuate territorial and social divides. Heywood (2021), in an overview of the distance between economic policy and socio-economic entitlement in South Africa, supports your position that institutions have a tendency to fail to respond coherently to structural inequity—a theme echoed in the fractured Italian system. Environmental and public health analysis further contributes to this background: Wang et al. (2023) contend that effects of policy ought to be assessed explicitly in terms of effects on disparities, a call well-supported by your conclusion that civil justice efficiency measures need to incorporate socio-economic data to ensure equitable reform.

Similar to this research's focus on inequality affecting the availability of an efficient legal process in Italy, Wu, Kim, and Lin (2022) examine the unequal distribution of green spaces in Chinese cities by socioeconomic class, proposing similar distributive and structural explanations for inequality in the availability of public goods. Similar to the regional digital divides in Italy, Hasan and Rupa (2021) examine how the digitalization of the Bangladeshi judiciary affects the availability of the right to a fair trial and the tensions between technology and inclusion. The findings of this study, which show a complex relationship between income inequality, civic engagement, and the efficacy of the legal system, are supported by Mentovich, Prescott, and Rabinovich-Einy's (2023) identification of the effects of subjective beliefs and income levels on the legitimacy of online proceedings. A conceptual analogy to legal institutions functioning effectively to harness social change and overcome structural disadvantage is offered by Eden et al. (2024), who place an emphasis on education policy, equity, and access. Similar to this study's finding of a regional mismatch between legal demand and capability in Italy, Shanahan et al. (2022) find a mismatch between the operational response of civil courts and user demand. The social and environmental foundations of Black Americans' public health disadvantages are demonstrated by Lord, Harris, and Ambs (2023), who also conceptually show that structural drivers have an impact on legal outcomes and procedural slowdown. This study's findings that income inequality and socioeconomic deprivation are linked to longer civil trial lengths are closely aligned with Brito et al.'s (2022) introduction of the framework of racial capitalism operating within civil courts, which suggests that the legal system can reinforce economic and social hierarchies. This study supports the call for courts and the social services system to take integrated action to address the causes of legal slowdown. Presler (2021) criticizes the institutional deferral between courts and health care and raises broader concerns about institutional fragmentation in responding to the cause of legal slowdown. In a similar vein to institutional vulnerability exposed when socioeconomic vulnerability and judicial slowdown co-occur, Wang and Hulme (2021) provide evidence of socioeconomic status and physical vulnerability. Notably, Forde, Kappler, and Björkdahl (2021) and Alibhai et al. (2022) offer global summaries of structural violence and care access in fragile states, supporting the idea that deficiencies in institutional efficacy, whether legal or health, are a sign of underlying territorial and social injustices.

In keeping with this research call for territorialized judicial reform in Italy, DeBray et al. (2022) advocate a civil rights framework to education policy in the U.S. by calling attention to the extent to which institutional design can both mitigate and reinforce structural disadvantage. Regional variations in systems of justice can have effects on civic trust and legal conduct outside the courtroom, according to development evidence reported by Elenbaas and Mistry (2021), and demonstrate that

representations of justice and inequality are internalized early in life. Socioeconomic status and health in India are paired by Bhatnagar and Padilla-Zakour (2021) in a call supporting the assumption that systemic inequality manifests itself within a range of institutions, ranging from legal to medical ones. Your analysis of civic participation and the disparate effects on legal demand by region is in keeping with that of Lerner and Rottman (2021) to identify that socioeconomic status influences perception of responsibility to the environmental. Setting a health justice agenda in a post-pandemic world is key, maintain Benfer et al. (2021), and cite too the importance of integrated service delivery systems. This perspective is entirely in line with your policy proposal that courts and social services recognize each other. The effect of late payment impacting infrastructure projects is a subject studied with an economic analogy by Chadee et al. (2023) who provide an economic metaphor of the way legal system delay disrupts institutional and personal plans and has a domino effect on development at the level of neighborhoods. Analogous to your argument that increased socioeconomic empowerment can de-congest legal courts, Ayub et al. (2024) write of Islamic waqf within a financial mechanism to socioeconomic development and reference alternative institutional arrangements that may reduce economic dependence and perhaps litigation volumes. Analogous to your argument that legal delay should be seen as symptomatic of more deep-seating social injustices, Chowkwanyun (2022) charts evolution of environmental justice and contributes penetrating analysis to the nexus of distributive and procedural justice in public policy and is included here twice.

Just like your argument that reforming justice should include more extensive regional mandates and structural conditions, Abdussamad et al. (2024) reiterate the need for constitutional balance in harmonizing environmental and socioeconomic concerns. Just like how long-lasting legal delays will discourage people from accessing formal judicial institutions, Ritchie and Long (2021) show that processes of paying compensation after disaster will encourage avoidance behaviors in entire communities. Jahn et al. (2023) show robust evidence that law, institutional effectiveness, and death are all interconnected, showing the effect that structurally embedded legal imbalances have on public health. This reinforces your conclusion that legal inefficiency goes with inequality and poverty. Your observation that legal institutions can strengthen instead of alleviate socioeconomic exclusion is vindicated by DeMarco, Dwyer, and Haynie's (2021) discussion of the way that participation in the criminal justice system can lead to a chain of economic disadvantages. In the discussion of the politics of rights enforcement, Botero (2023) illustrates how courts become venues of distributive and political dispute, a discussion that your research reinforces by illustrating the way that legal delays show competition over limited institutional resources. Ahmed et al. (2023) discuss the way that socioeconomic barriers affect education and work, especially for women in STEM. This reinforces the overall hypothesis of your research, that systemic disadvantage by sectors is mutually reinforcing and manifests in the courts. Just like your argument that civic engagement has ambivalent effects on trial length, Voukkali et al. (2023) discuss the socio-behavioral shift to a circular economy, and the importance of civics attitudes and structural assistance. Reinforcing your conceptual argument that institutional delays, whether in the legal system or in health, disproportionately affect marginalized people and are a sign of systemic inefficiencies, Llanos et al. (2023) discuss health inequities in cancer treatment slowdowns amidst the era of COVID-19. Bixby (2023) reiterates the way that socioeconomic status influences the burden of disability to the family, supporting your inclusion of economic indicators at the family level to forecast strain within the legal system. In conclusion, your empirical evidence that Italian non-profit organizations alleviate judicial inefficiency and perform a compensatory institutional function in areas with poorer public services is complemented by Doğan and Genç (2021) with useful evidence on Turkish civil society actors responding more rapidly and efficaciously than public institutions in a situation of crises.

Just like your observation in your paper, civil delays disproportionately affect marginalized groups and cause cumulated disadvantage at the interface between institutions. Alang and Blackstock (2023) provide a health justice approach to addressing structural inequities in HIV and COVID-19 health outcomes. As with the distributive conflicts underpinning legal congestion in economies with economic polarization, Kalt (2021) looks at tensions at the interface of labor rights and climate rectitude in Germany's lignite sector, underscoring how contested narratives of equity and fairness are constructed in structural change. A main theme of your regional panel study is that both legal and environmental systems of justice embody spatial inequalities that are associated with socioeconomic status. Casey et al. (2021) discuss climate justice by way of environmental exposure in California. In their comprehensive study of the role that legal aid will play in crossing the gap in accessing justice in the future, Denvir et al. (2023) provide evidence to back your policy suggestion to improve supporting structures in areas of underserved people to relieve procedural bottlenecks. As with your conception of legal inefficiency both as a cause and effect of regional institutional vulnerability, Cvetković and Šišović (2024) discuss the interface of sociodemographic vulnerability and community disaster resilience. In support of your suggestion in effect that structural staffing and administrative capacity ceilings are a common cause of legal system bottlenecks, Khassawneh and Abaker (2022) situate human resource concerns in Global South institutions. Identifying the psychological processes embodied in perceived fairness and institutional trust—drivers of engagement with civil courts in your Italian example—Li and Hu (2021) show meritocratic belief to interact with socioeconomic status and community setting in China. Considering civil juries to be a mechanism of democratic regeneration, Jolly, Hans, and Peck (2022) broach the normative consequences of equitable access to justice, a point consistent with your more general call for institutional responsiveness and accountability. As with your focus upon the importance of civic infrastructure and non-nationals, Ogilvie and Kisely (2022) discuss the interface of criminal and health outcomes with young Australians and the notion that without proactive social investments, legal systems embody and reproduce vulnerability. Finally, Consolazio et al. (2021) offer robust empirical evidence for your regional framework that shows socioeconomic context affecting not just health but legal performance too by measuring the way neighborhood-level deprivation in Milan and Lodi impacted pandemic results.

## 3) Data and Methodology

Utilizing a panel dataset with socioeconomic, institutional, and environmental variables, this study examines the drivers of the length of civil proceedings (LCP) in all 20 Italian regions over 2004 to 2022. Average time of concluded civil cases is operationalized by the dependent variable, LCP, and this is a proxy measure of judicial efficiency. Relevant driver factors include Net Income Inequality (NII), Severe Material Deprivation (SMD), Low Work Intensity (LWI), Economic Situation of the Family (ESF), Civic and Political Participation (CPP), and Non-Profit Organizations (NPO). Regional differences in civic infrastructure, labor market participation, and economic mix are captured by the variables. The model utilizes a host of environmental and infrastructural instruments derived from ISTAT-BES, such as climate extremity measures, water services, urban waste, and environmental awareness, to address endogeneity. A panel instrumental variable approach with a robust mechanism to examine the influence of structural conditions on institutional efficiency in courts is possible with this multi-pronged dataset (Table 1).

Table 1. Description of data.

	Variable	Acronym	Description
Y	Length of civil proceedings	LCP	Actual average duration in days of proceedings concluded at ordinary courts (Civil Sector - Sicid Area, net of the activity of the guardianship judge, the preventive technical assessment in matters of social security and, since 2017, the verbalization of a sworn declaration).
X	Net income inequality (s80/s20)	NII	Ratio of total equivalent income received by the 20% of the population with the highest income to that received by the 20% of the population with the lowest income.
	Severe material deprivation	SMD	Percentage of people in households that record at least four signs of material deprivation out of the nine listed below: i) not being able to cover unexpected expenses (of 850 euros starting from the 2020 survey); ii) not being able to afford a week of vacation per year away from home; iii) having arrears on mortgage, rent, bills or other type of loan; iv) not being able to afford an adequate meal every two days, i.e. with meat or fish proteins (or vegetarian equivalent); v) not being able to adequately heat the home; not being able to afford: vi) a washing machine; vii) a color television; viii) a telephone; ix) a car.
	Low work intensity	LWI	Percentage of people living in households for which the ratio between the total number of months worked by the family members during the income reference year (the one preceding the survey year) and the total number of months theoretically available for work activities is less than 0.20. For the purposes of calculating this ratio, family members aged between 18 and 59 are considered, excluding students in the age group between 18 and 24. Families composed only of minors, students aged under 25 and persons aged 60 or over are not considered in the calculation of the indicator.
	Economic situation of the family	ESF	Families reporting that their economic situation has worsened or greatly worsened compared to the previous year.
	Civic and political participation	СРР	Percentage of people aged 14 and over who carry out at least one activity of civic and political participation out of the total of people aged 14 and over. The activities considered are: talking about politics at least once a week; informing oneself about the facts of Italian politics at least once a week; participating online in consultations or votes on social (civic) or political issues (e.g. urban planning, signing a petition) at least once in the 3 months preceding the interview; expressing opinions on social or political issues through websites or social media at least once in the 3 months preceding the interview.
	Non-profit organizations Index of duration of hot	NPO	Share of non-profit organizations per 10,000 inhabitants.  Number of days in the year in which the maximum temperature is
	periods	IDHP	above the 90th percentile of the distribution in the reference climatological period (1981-2010), for at least six consecutive days.
	Days with extremely intense precipitation	DEIP	Number of days in the year in which the cumulative daily precipitation exceeds or is equal to the value of 50 mm.
	Consecutive days without rain	CDWR	Maximum number of consecutive days in the year with daily precipitation less than or equal to 1 mm.
	Population exposed to the risk of landslides	PERL	Percentage of population living in areas with high and very high landslide hazard.
	Population exposed to the risk of floods	PERF	Percentage of the population living in areas with medium hydraulic risk (return period 100-200 years ex Legislative Decree 49/2010).
	Dispersion from municipal water supply	DMWG	Percentage of the total volume of total water losses in municipal drinking water distribution networks (difference between the volume introduced into the network and the authorised volume
	Wastewater treatment	DMWS	supplied) on the total water introduced  Percentage share of polluting loads flowing into secondary or advanced plants, in equivalent inhabitants, compared to the total
Z		WWT	urban loads (Aetu) generated.

D. d.:	PA	areas included in the official list of protected areas (Euap) or
D. d.:		halanging to the Nature 2000 Naturals
	ГA	belonging to the Natura 2000 Network.
Bathing sea coasts		Percentage of authorized bathing coasts on the total coastline in
	DCC	accordance with current regulations.
A '1 1'1' C 1	BSC	
Availability of urban green	ATICA	Square meters of urban greenery per inhabitant in provincial
areas	AUGA	capitals/metropolitan cities.
Soil sealing by artificial	22.2	Percentage of impermeable soil in relation to the total land surface.
cover	SSAC	
Internal material		Internal material consumption is a measure of the amount of
consumption		matter, other than water and air, used each year by the socio-
		economic system and released into the environment (incorporated
		in emissions or waste) or accumulated in new anthropogenic stocks
	IMC	(both capital goods and other durable goods and waste).
Urban waste produced	UWP	Municipal waste produced per inhabitant.
Disposal of urban waste in		Percentage of municipal waste sent to landfill out of total
landfill	DUWL	municipal waste produced.
Contaminated sites		Incidence of sites of national interest
		(Sin) and sites under the jurisdiction of the regions
	CS	on the territorial surface, values per 1,000.
Concern about climate		Percentage of people aged 14 and over who consider climate
change		change or the increased greenhouse effect and the ozone layer to
	CCC	be among the top 5 environmental concerns.
Satisfaction with the		Percentage of people aged 14 and over who are very or fairly
environmental situation		satisfied with the environmental situation (air, water, noise) of the
	SES	area in which they live
Concern about the loss of		
biodiversity		
	CLB	concerns
Concern about the loss of biodiversity	CLB	Percentage of people aged 14 and over who consider the extinction of plant/animal species among the 5 priority environmental

Note. Data from ISTAT-BES. Link: <a href="https://www.istat.it/statistiche-per-temi/focus/benessere-e-sostenibilita/la-misurazione-del-benessere-bes/gli-indicatori-del-bes/">https://www.istat.it/statistiche-per-temi/focus/benessere-e-sostenibilita/la-misurazione-del-benessere-bes/gli-indicatori-del-bes/</a>

Methodology. The article employs a panel data model and thereafter estimates the panel data instrumental variable (IV). Both the cross-sectional and time-series dimensions of the dataset are leveraged by panel data models, giving them a considerable advantage by allowing the researcher to account for unobserved heterogeneity, or regional characteristics that over time vary but are different between units. Invisible fixed effects have to be controlled for in the Italian case, where there are considerable and long-lasting structural differences between regions (i.e., between North and South). To better approximate the effect of time-varying socio-economic variables, like income inequality, material deprivation, or civic engagement, on trial length, the fixed effects (FE) model is able to identify the within-region variability effectively.

The danger of endogeneity, however, is a potential drawback of standard panel data specifications. Omitting variable bias (unmeasured regional quality of institutions that influence both efficiency in justice and socio-economic factors) or reverse causality (longer trial length discouraging citizen participation) renders influential regressors such as income inequality or citizen participation endogenous. Estimated coefficients are biased and inconsistent in such cases. Employing a Two-Stage Least Squares (2SLS) within a panel data framework, the paper effectively employs a panel data instrumental variable strategy to overcome this. Employing a set of exogenous instruments—elements that are not correlated with the error term in the LCP equation but with the endogenous regressors—corrects for endogeneity.

The measures employed within this research, e.g., environmental and infrastructural measures such as availability of urban parks and gardens, protected areas, risk of flooding and wastewater treatment, are solid. Such measures are empirically related to institutional infrastructure and socioeconomic vulnerability but are likely to be exogenous to the dynamic of the legal system's operation. The

measures are helpful tools since, e.g., regions with poor infrastructure or environmental protection can be expected to also have more inequality or a lower level of labor market participation.

Also, the adoption of IV procedures combined with panel data increases causal inference. The IV approach addresses simultaneity and omitted variables, increasing the validity of causal conclusions, while the fixed effects model addresses issues of internal validity to the extent that time-invariant regional characteristics are controlled. Further robustness checks over a range of different model specifications are also offered by the use of both random effects G2SLS and fixed-effects TSLS. Consistency of findings over methods, especially the negative effect of non-profit density and the positive and significant effects of income inequality, low work intensity, and civic participation also supports the reliability of the conclusions. In conclusion, the two-step estimation strategy—fixed and random effects panel models followed by panel IV models—is both statistically sound and substantively appropriate to capture the complex, multi-layered explanations of civil justice delays. Institutional results are conceptualized here as endogenous to broader socio-economic and territorial configurations, and this reflects a holistic perspective to law and economics. Such a methodological framework enhances the empirical and policy findings of the study and at the same time allows a more sophisticated observation of regional differentials.

# 4) Panel data

An empirical approach that can measure both cross-sectional differences and dynamics over time is crucial to understand the structural causes of civil justice delays. In this respect, panel data analysis offers a robust framework to analyze the mechanism by which institutional and socioeconomic factors affect the length of civil proceedings over time and geographically. Panel data estimators provide a means to control over time-invariant and unobserved regional heterogeneity, such as historical traditions of law, people's attitudes to litigation, or structural administrative inefficiencies, that could bias the estimated impacts of the observed variables. This is in contrast to time-series or cross-sectional methods only. This research considers the drivers of civil trial length (LCP) in all 20 Italian regions between 2004 and 2022 with a panel data approach. The following equation has been estimated by us:

$$LCP = \alpha + \beta_1 (NII)_{it} + \beta_2 (SMD)_{it} + \beta_3 (LWI)_{it} + \beta_4 (ESF)_{it} + \beta_5 (CPP)_{it} + \beta_6 (NPO)_{it}$$
  
Where i=20 and t=[2004;2022].

The results are indicated in the following Table 2.

Table 2. Results of the econometric model.

	Fixed-effects, using 355 observations			Random-effects (GLS), using 355 observations			
	Coefficient	Std. Error	t-ratio	Coefficient	Std. Error	Z	
Const	-263.778***	51.2385	-5.148	-250.522***	46.5051	-5.387	
NII	33.0817***	7.87440	4.201	29.9809***	7.69302	3.897	
SMD	4.03362 3.01979		1.336	4.90785*	2.84029	1.728	
LWI	9.10208** 3.99387		2.279	8.79742***	3.37573	2.606	
ESF	7.41119***	0.850882	8.710	7.31361***	0.831728	8.793	
CPP	5.32514***	0.381901	13.94	5.22635***	0.365848	14.29	
NPO	-2.50565***	0.392592	-6.382	-2.40376***	0.385261	-6.239	
Statistics	Mean dependent var		239.6648	Mean dependent var		239.6648	
	Sum squared resid		7105386	Sum squared resid		9440418	
	LSDV R-squared		0.720201	Log-likelihood		-2312.163	
	LSDV F(25, 329)		33.87373	Schwarz criterion		4665.431	
	Log-likelihood		-2261.727	rho		0.517659	
	Schwarz criterion		4676.129	S.D. dependent var		267.8360	

	rho	0.517659	S.E. of regression	164.4686	
	S.D. dependent var	239.6648	Akaike criterion	4638.326	
	S.E. of regression	7105386	Hannan-Quinn 4649.109		
	Within R-squared	0.720201	Durbin-Watson	0.928159	
	P-value(F) 33.87373 Akaike criterion -2261.727				
	Hannan-Quinn	4676.129			
	Durbin-Watson	0.517659			
Tests	Joint test on named regressors	s -	'Between' variance = 7009.44		
	Test statistic: $F(6, 329) = 103$	5.202	'Within' variance = 20015.2		
	with p-value = $P(F(6, 329) >$	105.202) =	mean theta = $0.627604$		
	1.80744e-73		Joint test on named regressors -		
			Asymptotic test statistic: Chi-square(6) = $653.657$		
	Test for differing group interes	cepts -	with p-value = $6.17372e-138$		
	Null hypothesis: The groups	have a			
	Test statistic: $F(19, 329) = 5.37262$		Breusch-Pagan test -		
			Null hypothesis: Variance of the unit-specific error $= 0$		
	with p-value = $P(F(19, 329))$	> 5.37262) =	Asymptotic test statistic: Chi-square(1) = 93.6295		
	2.08136e-11		with p-value = $3.80481e-22$		
			Hausman test -		
			Null hypothesis: GLS estimates are consistent Asymptotic test statistic: Chi-square(6) = 9.54724		
			with p-value = $0.145059$		

The results show that longer civil cases are strongly positively related to income inequality (NII). Greater litigation or limited legal resource availability in unequal areas can be the source of the perception that increased income differences impose a burden upon judicial systems. Lower work intensity (LWI) and decreasing economic conditions of the family (ESF) are associated with longer trial lengths, reflecting that economic marginalization aggravates institutional inefficiency. Though the effect of extreme material deprivation (SMD) is moderate only, this is directionally consistent with these findings. Trial length is, however, positively associated with civic and political participation (CPP) that could be a sign of increased demand and legal action in more active areas. Trial length, alternatively, is strongly and negatively related to the presence of non-profit organizations (NPO) and could be hinting at more effective civil society infrastructures leading to faster and more efficient delivery of justice. A large portion of within-region variability in trial length is explained by the included regressors, by the Fixed Effects model's excellent within R-squared of 0.72 in terms of the quality of fitting. The combined effect of the included regressors is assured by the highly significant F-statistic of the test of joint significance of regressors (F = 105.20, p  $\approx$  0). The employment of a Fixed Effects framework to correct for regional heterogeneity is confirmed when a test of different group intercepts rejects the null hypothesis (F = 5.37, p < 0.001). The Random Effects model assures further robustness of the included predictors by confirming that all predictors are significant with a chi-square test of joint significance ( $\chi^2 = 653.66$ , p < 0.001). The employment of a panel data framework is warranted by the highly significant finding ( $\chi^2 = 93.63$ , p < 0.001) of the test with the Breusch-Pagan test confirming the presence of unit-specific error heteroschedasticity. Finally, the Hausman test with RE and FE comparison fails to reject the null hypothesis ( $\chi^2 = 9.55$ , p = 0.145) and indicates that the RE model provides reliable estimates and could be more efficient, in particular, when projecting to additional Italian regions outside the sample.

Positive relationships between Length of civil proceedings and Net income inequality (s80/s20). There are consistent positive relations between net income inequality (s80/s20) and the length of civil proceedings. The length of civil proceedings and net income inequality, based upon the S80/S20 ratio, are positively related in the Italian case. This finding is both theoretically and empirically grounded.

The extent to which incomes are unequal in a region is expressed by the S80/S20 ratio, measuring the incomes of the wealthiest 20% compared to those of the poorest 20%. Inequality can be exacerbated by lengthy civil litigation in various manners. First, disproportionately harmed by derelictions of justice are the economically disadvantaged and those that cannot afford to sit out a lengthy legal fight. Tenants or small claimants, for example, will opt to abandon a dispute due to cost, missing money or protection under the law. Wealthier individuals or enterprises, by contrast, are able to strategically avail themselves of delays. Second, ineffective civil justice dissuades property ownership and enforcement of contracts, deterring entrepreneurs and small firms from investing or expanding, especially in the slow-working South. This reinforces pre-existing divisions by stalling inclusive economic expansion. In Italy, regions like Sicily and Calabria have a more elevated S80/S20 and longer trial length, and there is a spatial correlation. These trends could be a sign of a structural disequilibrium where slow justice reinforces structural inequality. In all, ineffectiveness of civil justice is a regressive institutional obstacle to equity and accessibility. Streamlining procedures could thus have both legal and redistributive effects, enhancing equity to all levels of the economy.

Positive relationships between Length of civil proceedings and Severe material deprivation, Severe material disadvantage is positively related to the length of civil proceedings all across Italy, showing there to be a close connection between inefficient procedures and socioeconomic exclusion. Severe material disadvantage, a standard direct measure of poverty in the EU, is the lack of capacity to afford unexpected expenses, wholesome food or sufficient heating. Legal remedies necessitated to defend disadvantaged people are stalled or extinguished when civil cases are postponed. Delayed justice is especially damaging to individuals suffering consumer fraud, labor disputes, or eviction. For them, speedy judgment can be a matter of stability or poverty. Southern Italy, comprising Sicily, Campania, and Calabria, has longer average case durations and a high level of material disadvantage. This area geographically coincides. Ineffectual or weak enforcement of the rule of law makes it more difficult for the poor to defend their ownership rights, claim their social rights, or contest exploitative contracts. Therefore, better or prolonged disadvantage is a consequence of a judicial delay. Further, inefficient courts discourage investments, with negative effects on regional development and the elimination of employment alternatives, primarily to people with lower skill levels. By driving a poverty trap and weak enforcement of institutions, this increases the state of disadvantage. Ultimately, the structural inefficiency of the courts makes material adversity worse. Delayed civil justice could thus serve a dual purpose: to defend the rule of law, and to be a powerful, hidden anti-poverty tool.

Positive relationships between Length of civil proceedings and Low work intensity. Lengthy civil proceedings and low work intensity are positively related between Italian regions, consistent with sound theory and evidence. The rate at which working-age household members worked little or nothing at all in the year is captured by the Eurostat measure of low work intensity. It is an essential part of multidimensional poverty. Long-duration civil proceedings are a symptom of larger institutional inefficiencies with a direct and indirect effect on labor markets. Labor disputes (unfair dismissals, wage arrears, and breaches of contract) are harder to effectively resolve where there are slow judicial systems. This discourages individuals to enter the labor market, especially precarious and informal workers who cannot absorb protracted legal disputes. Delayed judgements erode institutional confidence in the labor market. Firms in regions with a lot of delay may be reluctant to hire since they are worried about potential suits that take several years to resolve. In the meantime, if a regime is perceived to be exploitative or non-protective, individuals may entirely abandon the formal labor market. In Italy, regions such as Sicily, Calabria, and Campania are characterized by both high levels of low work intensity and long civil case length. This spatial pattern captures the co-evolution of labor market distance and weak institutions. The dysfunctionality of the system evolves

to be a labor policy rather than just a legal issue. Considering all factors, legal system delay is a systemic barrier to full employment, especially in regions that are at risk. Besides the protection of rights, a more efficient court would subtly promote more inclusive and active labor participation.

Positive relationships between Length of civil proceedings and Economic situation of the family. In every Italian region, there is a positive relationship between the length of civil proceedings and the deterioration in the economic situation of families. Inefficiency in civil justice, measured by the average length of proceedings, is both a legal bottle neck and a key determinant of the economic situation of households. Both direct and indirect economic burdens are faced by families due to the delays within the law. The population involved in unsettled cases, like claims to alimony, ownership of assets, or inheritance, can be exposed to long-term economic uncertainty. Families can face problems with liquidity, debts, or poverty due to delayed remuneration or asset restitution. Long cases in courts also erode institutional trust and discourage the population to participate in the formal economy. Apprehensions of a long and costly legal process can discourage people to enter rental contracts, to start small firms, or to claim legitimate rights. Low-income and middle-income households are disproportionately affected since their economic situation is often related to effective law enforcement. This relationship is confirmed by Italian empirical evidence. Besides having longer civil case lengths, regions like Sicily, Calabria, and Campania have also a more pronounced deterioration of the economic situation of families year by year. Conversely, economic indicators related to the family are more favorable in northern regions where proceedings are faster. Ultimately, the effectiveness of civil justice behaves like a sort of economic infrastructure. When this fails, households that are exposed to economic risks unnecessarily carry a disproportionate burden of the economic cost, and hence legal prolongation is a source of additional economic vulnerability.

Positive relationships between Length of civil proceedings and Civic and political participation. In all regions in Italy, there exists a positive relationship between the length of civil proceedings and the deterioration of the financial situation of families. Inefficiency in civil justice, measured by the average length of proceedings, is both a legal bottleneck and a contributing factor to the financial situation of households. Both direct and indirect losses are suffered by families due to legal lags. Financial uncertainty over the long term can be faced by those involved in unresolved issues such as alimony claims, property rights, or inheritance. Family households can suffer from a lack of liquidity, debt build-up, or poverty due to late payment or asset return. Long cases in courts also erode institutional trust, discouraging people from entering the formal economy. Concerns over a long and costly legal process could discourage families from leasing property, starting small firms, or seeking legitimate claims. Poor- and middle-income households are strongly affected, since their economic security is often tied with effective law enforcement. This relationship is confirmed by Italian empirical patterns. Besides having longer civil case length, regions such as Sicily, Calabria, and Campania also have more cases of worsening economic conditions year by year. Conversely, family economic indices are better in northern regions with faster legal proceedings. Ultimately, civil judicial effectiveness is a kind of economic infra-structure. When ineffective, at-risk households carry an unequal burden of the economic cost, and legal lags become a source of heightened economic vulnerability.

Negative relationship between Length of civil proceedings and Non-profit organizations. The vibrancy of non-profit entities in various Italian regions has a negative correlation with the length of civil proceedings. Inefficient civil justice, and notably lengthy trial phases, creates a climate that is not conducive to the development, viability, and effectiveness of third actors. A stable and supporting institutional climate is essential to nonprofit entities, widely responsible for citizen engagement,

welfare provisioning, and social integration. The persistence of civil cases is a reflection of institutional fragility, and this discourages formalization, chases away prospective donors and volunteers, and makes the enforcement of contracts or settlement of conflicts more complicated. In practice, delayed resolutions of labor disputes, public contracting, or property claims are able to suspend non-profit operations. Smaller enterprises that are oftentimes endowed with fewer resources are not able to stand in legal uncertainty over a long time. Moreover, a slow judiciary discourages entrepreneurship at the citizen level and disincentivizes local participation by eroding confidence in institutional processes. This dynamic is underpinned by Italian data. Active non-profit organization population levels per capita are invariably higher in northern regions like Emilia-Romagna and Trentino-Alto Adige, where civil trial proceedings take less time. Conversely, non-profit presence and levels of activity are much reduced in southern regions like Calabria and Sicily, where civil proceedings are much longer. Ultimately, a robust civic sector is made possible by a functional civil justice system. As non-profits depend upon institutional reliability to serve society, provide services to people in need, and reinforce democratic culture, its malfunctioning prevents them from expanding.

#### 4.1 Panel Data Instrumental Variable

The analysis employs a panel data instrumental variable technique to better identify the structural drivers that determine the length of civil proceedings in different Italian regions. Two-Stage Least Squares (2SLS) estimation under both random-effects (G2SLS) and fixed-effects (TSLS) specifications is employed, taking cognizance of the possibility of endogeneity of key socio-economic controls such as income inequality, material deprivation, labor market vulnerability, household economic strain, civic participation, and non-profit organization density. The equation below has been estimated:

$$LCP_{it} = \alpha + \beta_1 \widehat{NII_{it}} + \beta_2 \widehat{SMD_{it}} + \beta_3 \widehat{LWI_{it}} + \beta_4 \widehat{ESF_{it}} + \beta_5 \widehat{CPP_{it}} + \beta_6 \widehat{NPO_{it}} + u_{it}$$

$$X_{it}^K = \gamma_0^k + \sum_{j=1}^J \gamma_j^k Z_{jit} + \eta_{it}^k$$

$$k=1,....6$$

Where:

- $X_{it}^{K}$  is one of the endogenous regressors NII SMD LWI ESF CPP NPO;
- $Z_{jit}$  includes the following instruments IDHP, DEIP, CDWR, PERL, PERF, DMWS, WWT, PA, BSC, AUGA, SSAC, IMC, UWP, DUWL, CS, CCC, SES, CLB;
- $\eta_{it}^k$  is the first stage error term.

A synthesis of the results is in the following table 3

Table 3. Results of the Instrumental Variable Panel Data.

Dependent variable: LCP								
	Endogenous: NII SMD LWI ESF CPP NPO							
Instrumen	Instruments: IDHP, DEIP, CDWR, PERL, PERF, DMWS, WWT, PA, BSC, AUGA,							
	SSAC, IMC, UWP, DUWL, CS, CCC, SES, CLB							
	G2SLS random effects, using 315 Fixed-effects TSLS, using 315							
	ol	bservations		observations				
	coefficient	std. error	Z	coefficient	std. error	z		
Const	-675.326	100.947	-6.690	-816.365	147.164	-5.547		
NII	107.565	183.562	5.860	112.822	171.258	6.588		
SMD	-416.587	139.460	-2.987	-440.810	124.384	-3.544		

LWI	409.853	129.800	3.158	537.169	178.158	3.015
ESF	104.897	166.396	6.304	110.823	171.997	6.443
CPP	919.505	106.533	8.631	900.902	0.982287	9.171
NPO	-705.708	0.995215	-7.091	-710.790	0.959082	-7.411
Statistics	sigma-hat(within) = 188.59383			SSR = 1.0279e + 007		
	sigma-hat(between) = 63.39094			sigma-hat = 188.594 (df = 289)		
	SSR = 332.328			R-squared = $corr(y, yhat)^2 = $		
	sigma-hat = $1.03874$ (df = $308$ )			0.570262		
	R-squared = $corr(y, yhat)^2 =$			Included units = 20		
	0.592596			Time-series length: min = 14, max		
	Included units = 20			= 16		
	Time-series length: min = 14, max			Wald chi-square $(6) = 416.331$		
	= 16			[0.0000]		
	Wald chi-square $(6) = 402.974$			Null hypothesis: The groups have a		
	[0.0000]		common intercept			
				Test statistic: $F(19, 289) = 4.18925$		
				[0.0000]		

The analysis focuses on factors that affect the Length of Civil Proceedings (LCP) concept, a measure of legal system performance and institutional effectiveness, by filtering them through Environmental, Social, and Governance (ESG) factors. It is founded upon fixed-effects and random-effects G2SLS specifications that were estimated with 20 Italian regions over a span of 14 to 16 years. Employing a broad array of 24 exogenous variables that account for environmental pressures, resource consumption, public environmental consciousness, and infrastructural conditions within Italian regions, the model utilizes six endogenous regressors: Severe Material Deprivation (SMD), Low Work Intensity (LWI), Civic and Political Participation (CPP), Non-Profit Organizations (NPO), Economic Situation of the Family (ESF), and Net Income Inequality (NII).

The evidence supports robust and consistent patterns with both specifications. In each set of specifications, there is a positive and significant coefficient of LCP with respect to income inequality (NII), meaning that more unequal areas generally have longer civil proceedings. This could be due to deeper institutional inefficiencies and a lack of legal resource availability in more unequal regions. Instrumental variables such as protected areas (PA) and proximity to green availability within cities (AUGA) that act as proxies to regional investments in sustainable and equitable development lend validity to the robustness of this association.

The negative and substantial correlation between material deprivation (SMD) and LCP indicates that, under circumstances of more intense deprivation, legal processes are underutilized or streamlined—due to institutional participation or institutional neglect. Indices such as soil sealing (SSAC) and waste disposal by landfills (DUWL), reflecting strained territorial governance and perhaps endangered administrative structures, strengthen this.

Low Work Intensity (LWI) positively and strongly correlates with LCP, with regions that are less integrated with respect to the labor market taking longer to process legal and administrative procedures. Infrastructure measures such as dispersion of water supplies (DMWS) and wastewater treatment (WWT) are key region-based indicators that capture regional capacity to deliver services and validate this structural relationship.

In addition to this, there also exists a positive and substantial influence from the Economic Situation of Families (ESF) that highlights the potential that socioeconomic pressure and institutional postponement are interrelated, or at least the consequence of augmented legal demand or procedural complexity. The broader awareness of ESF in association with environmental vulnerability and civic consciousness is underpinned by measures such as the loss of biodiversity consciousness (CLB) and climate change anxiety (CCC).

With a very large coefficient in both specifications, Civic and Political Participation (CPP) has the strongest positive influence. This suggests that longer civil cases are also found where levels of political and civic life are high—potentially due to more legal activity, institutional controls, and a more litigious climate. Measures like the intensity of rain days (DEIP) and the length of heatwaves (IDHP) situate this within the realm of places that are more exposed to environmental pressures and, consequently, are more likely to be in contact with the legal system.

Finally, with strongly significant coefficients, Non-Profit Organizations (NPO) are found to have a negative relationship with LCP. This indicates that an effective civil society can overcome institutional bottlenecks, perhaps by ensuring administrative efficiency, mediation, or legal literacy assistance. The presence of methods such as internal material consumption (IMC) and urban waste production (UWP) that stand for organized environmental control and could be a measure of institutional maturity is consistent with this relationship.

Overall, the models demonstrate good instrument validity, significant predictors at the statistical level, and acceptable explanatory power ( $R2 \approx 0.57$ –0.59). Fixed effects to control for the regional characteristics are warranted by the rejection of the null hypothesis in the F-test of equal intercepts, and the Wald tests confirm the joint significance of endogenous regressors. The conclusion emphasizes the complex interplays that underpin the length of civil proceedings in different Italian regions, such socioeconomic disparity, environmental infrastructure, and institutional capacity. The need for comprehensive policy measures addressing social justice, participatory governance, environmental resilience, and legal reform is necessitated by the different effects of each ESG factor: social deprivation, environmental capacity, and civic engagement.

# 5. Policy implications

The findings of this study have a number of considerable policy implications with respect to addressing Italy's lingering civil justice delay issue. The findings, when interpreted with law and economics in mind, suggest that trial length is closely associated with local socioeconomic conditions rather than solely determined by procedural inefficiencies or volume of cases. This has a couple of crucial implications with respect to the prioritization and design of judicial reform. For one, the presence of a strong statistical correlation between longer civil proceedings and income inequality indicates that structural pressure upon legal systems arises more in areas of increased economic polarization. This requires, at a policy level, a differential allocation of resources that addresses socioeconomic vulnerability. On the question of judicial investment, such as hiring additional judges, clerical staff, and case-management officers, regions with increased S80/S20 income ratios should be prioritized. In order to better allocate fiscal inputs to areas where inequality raises demand for legal services to a peak, budgeting models should incorporate socioeconomic measures rather than applying an equal distribution of judicial inputs to all regions. In order to reduce the impacts of inequality-fueled legal congestion, budgetary incentives could also be introduced to encourage lawyers to practice in underserved or in-demand regions.

Second, the association between longer trials and material deprivation and low work intensity creates the possibility that judicial inefficiency both causes and results from broader economic exclusion. Delaying in such cases actually increases economic insecurity, besides increasing litigation expenses, to parties to labor, housing, and social welfare claims. Legal aid schemes have to be beefed up and expanded to regions with unemployment or poverty levels in response. Underrepresentation or procedural mistakes by parties that are not legally represented are responsible for a disproportionate amount of legal holdup in such cases. Greater availability of public defenders in civil proceedings and targeted subsidies to legal services would make compliance with procedures better and reduce the time to resolve cases, especially those concerning economically disadvantaged parties.

Streamlining the legal procedure in cases over low-value claims—such as wage claims, disputes over tenancies, and small debts—can reduce legal system burdens by quite a margin. Procedures would be made more accessible and save unnecessary delay if fast-track arrangements were made available and using standard templates in such cases were encouraged.

Third, more proactive and integrated institutional response to economic hardship is needed, indicated by the relationship between longer trial length and worsening household economic health. Judges and courts need to be viewed not only as dispute-settling agencies but as components of a broader economic infrastructure. Legal remedies should be made less likely to cause further vulnerability to families facing economic shocks. Accordingly, policymakers should institute inter-institutional protocols of coordination between courts and social service agencies. Judicial actors with jurisdiction over family law or cases related to debts, for example, should be able to send parties to financial counseling, housing support, or mediation services. This would decrease the burden on courts and help to stabilize litigants and reduce default, dropout, and further litigation. Formal memoranda of understanding between courts, municipality offices, and offices of public welfare should be employed to integrate this kind of response in neighborhoods with persistently poor economic indicators. The demonstrated connection between longer civil trial length and more civic and political engagement is a key policy implication. This counterintuitive finding suggests that whereas civic engagement is often associated with more effective institutional outcomes, it could also translate to higher levels of legal mobilization within civil justice, and thus more delay. This indicates that individuals are more likely to exercise their rights and resolve disputes via the legal system where there is more political activism. Such areas should be targeted to introduce wider alternative dispute resolution (ADR) schemes as a policy reaction. By diverting cases that are ideally resolved via informal or consensual avenues, mediation and arbitration services, where institutionalized and made accessible, can ease the burden of the formal judiciary. Incentives such as waiving fees, tax deductions, or lower filing fees at courts should be explored for first-timer parties attempting alternative dispute resolution (ADR). In parallel, there is a need to make the public informed of ADR procedures and their legality. Rather than dissuading people from civic action, it should be channeled towards more efficient and scalable avenues of settlement.

One of the more useful findings of the study is that there is an inverse relationship between trial length and non-profit density. Judicial efficiency is one of the key roles of civil society associations with a focus on community assistance, mediation, and legal activism. Policymakers should therefore view them not merely as incidental participants in the formal system but as institutional complements to the same. In reducing trial length and improving access to justice, legal aid, mediation, and citizen education services offered by non-profits can be helped a lot by budgetary and legal backing. Financial partnerships with the public sector could also be established with public-private partnerships to promote new civil society projects where organizational density is lower. Universityrun legal clinics, mobile legal services, and resource offices in proximity to courts are some projects that can be scaled with a minimal investment. The contributions of these organizations could also be institutionalized and more systematic cooperation with public institutions encouraged by making them a part of legal proceedings through certification courses, accreditation, or by referral to courts. The findings of the research underpin the importance of applying a regional policy perspective in a more general sense. Italy is characterized by wide variations at the regional level in the quality of the judiciary and economic development. A single reform approach is at risk of overlooking regional reasons for inefficiency. Judicial reform policies should be applied to factual circumstances at a local level by applying contemporary socioeconomic data. Regional courts of observation, comprising local institutions, judicial experts, economists, and civil society actors, could provide a measure to do this. Their function would be to analyze regional bottlenecks and recommend measures specific to

each region. Such bodies would make national reform agendas more likely to succeed by assisting in situating them in empirical realities.

Judicial service digitization, too often hailed as a panacea, must be a considered and pragmatic venture taking socioeconomic realities into account. Technology can accelerate processes and enhance accessibility, and yet its benefits are not distributed evenly. Filing documents, viewing hearings, or accessing case data via digital venues can be a difficult or impossible mode of access for seniors and the poor. Investments in digital inclusion, legal literacy, and face-to-face aid services should thus be complemented by digitalization policy. A hybrid model that retains historical legal entry points and expands digital services could be the most efficient and equitable solution. Most importantly, the findings of this research should be integrated into revision of judicial performance metrics that are part of national monitoring and evaluation frameworks. Metric measures that take only clearance or processing time into account do not adjust for the socioeconomic factors that lead to delay. Policymakers and court executives can make more informed predictions about where and when to anticipate delay and design preventive steps when socioeconomic indicators are included in performance dashboards, like regional income disparity, poverty levels, or availability of legal aid.

#### 6. Conclusions

Through a law and economics approach to analyzing the causes of civil justice delay in Italy, this research has shown that regional socioeconomic conditions have a critical determinant effect on legal institutions' effectiveness. It has proven that the forces of income inequality, material disadvantage, economic stress at the household level, level of civic engagement, and concentration of non-profit associations all systematically correlate to the duration of civil proceedings. This is done by applying strict econometric methods to a dense panel dataset over almost two decades. This evidence supports a main conclusion: legal inefficiency reflects bigger socio-economic dysfunctions, rather than reflecting only internal judicial resource shortages or technical malpractice. Demand at the courts is greater, disputes are more complex, and litigants have fewer resources to manage protracted procedures in more unequal regions. Prevalent economic adversity puts the burden of still outstanding financial distress upon the legal system, burdening litigation volume but also undermining people's capacity to operate in the legal system effectively. Even if normatively appealing, civic and political participation is found to be related to more institutional overload and legal mobilization, and this could prolong the time to trial in regions where this occurs. The presence of non-profit associations, whose activities in legal aid, mediation, and procedural assistance help to alleviate traffic and streamline the efficiency of legal institutions, is also found in the research to be a factor that mitigates. It suggests that, whilst essential, judicial reform that emphasizes only digital innovation or acceleration in procedures will be inadequate without being part of a vision that accounts for the socio-economic contexts upon which legal bodies operate. Legal choices and economic and social systems relate to each other in dynamic and reciprocal fashion: inefficient courts deepen inequality, and inequality in turn fosters more inefficiency. For this reason, civil justice performance improvement requires a holistic policy design that includes labor market inclusion, redistriutional interventions, institutional reform, and supporting public goods to citizen assets. The research contributes to the law and economics literature theoretically by illustrating that legal efficiency can be explained by institutional embeddedness and regional economic geography as much as by legal institutions and incentives. It presents firm evidence that the length of trials is not randomly distributed but rather displays a robust pattern of institutional weakness and social disadvantage. Such findings have profound implications both for academics and policymakers. The findings give researchers new directions for interdisciplinary research that links public economics, social stratification, and judicial conduct. The results suggest that territorialized justice approaches that deal

with each region's distinctive socioeconomic characteristics are vital to policymakers. Ultimately, reform of the courtroom itself cannot develop a just and efficient civil justice system; there need to be pillars of social investment, economic opportunity, and institutional cohesion. Justice systems can only become faster, equitable, and robust by addressing and managing such interdependencies.

#### References

Wu, L., Kim, S. K., & Lin, C. (2022). Socioeconomic groups and their green spaces availability in urban areas of China: A distributional justice perspective. Environmental Science & Policy, 131, 26-35.

Abdussamad, Z., Harun, A. A., Muhtar, M. H., Puluhulawa, F. U., Swarianata, V., & Elfikri, N. F. (2024). Constitutional balance: Synchronizing energy and environmental policies with socioeconomic mandates. In E3S Web of Conferences (Vol. 506, p. 06006). EDP Sciences.

Ahmed, N., Chowdhury, A. M., Urmi, T., & Jamal, L. (2023). Impact of socio-economic factors on female students' enrollments in science, technology, engineering and mathematics and workplace challenges in Bangladesh. American Behavioral Scientist, 67(9), 1104-1121.

Alang, S., & Blackstock, O. (2023). Health justice: A framework for mitigating the impacts of HIV and COVID-19 on disproportionately affected communities. American Journal of Public Health, 113(2), 194-201.

Alibhai, K. M., Ziegler, B. R., Meddings, L., Batung, E., & Luginaah, I. (2022). Factors impacting antenatal care utilization: a systematic review of 37 fragile and conflict-affected situations. Conflict and health, 16(1), 33.

Ayub, M., Khan, K., Khan, M., & Ismail, M. (2024). Waqf for accelerating socioeconomic development: a proposed model with focus on Pakistan. Qualitative Research in Financial Markets, (ahead-of-print).

Benfer, E. A., Bhandary-Alexander, J., Cannon, Y., Makhlouf, M. D., & Pierson-Brown, T. (2021). Setting the health justice agenda: addressing health inequity & injustice in the post-pandemic clinic. Clinical L. Rev., 28, 45.

Bhatnagar, R. S., & Padilla-Zakour, O. I. (2021). Plant-based dietary practices and socioeconomic factors that influence anemia in India. Nutrients, 13(10), 3538.

Bixby, L. E. (2023). Disability is not a burden: the relationship between early childhood disability and maternal health depends on family socioeconomic status. Journal of Health and Social Behavior, 64(3), 354-369.

Botero, S. (2023). Courts that Matter: Activists, Judges, and the Politics of Rights Enforcement. Cambridge University Press.

Brito, T. L., Sabbeth, K. A., Steinberg, J. K., & Sudeall, L. (2022). Racial capitalism in the civil courts. Colum. L. Rev., 122, 1243.

Cannon, Y. (2021). Closing the health justice gap: access to justice in furtherance of health equity. Colum. Hum. Rts. L. Rev., 53, 517.

Casey, J. A., Cushing, L., Depsky, N., & Morello-Frosch, R. (2021). Climate justice and California's methane superemitters: Environmental equity assessment of community proximity and exposure intensity. Environmental science & technology, 55(21), 14746-14757.

Chadee, A., Ali, H., Gallage, S., & Rathnayake, U. (2023). Modelling the implications of delayed payments on contractors' cashflows on infrastructure projects.

Chowkwanyun, M. (2023). Environmental justice: where it has been, and where it might be going. Annual review of public health, 44(1), 93-111.

Consolazio, D., Murtas, R., Tunesi, S., Gervasi, F., Benassi, D., & Russo, A. G. (2021). Assessing the impact of individual characteristics and neighborhood socioeconomic status during the COVID-19 pandemic in the provinces of Milan and Lodi. International Journal of Health Services, 51(3), 311-324.

Cvetković, V. M., & Šišović, V. (2024). Understanding the sustainable development of community (social) disaster resilience in Serbia: Demographic and socio-economic impacts. Sustainability, 16(7), 2620.

DeBray, E., Finnigan, K. S., George, J., & Scott, J. (2022). A Civil Rights Framework for the Reauthorization of ESEA. National Education Policy Center.

DeMarco, L. M., Dwyer, R. E., & Haynie, D. L. (2021). The accumulation of disadvantage: Criminal justice contact, credit, and debt in the transition to adulthood. Criminology, 59(3), 545-580.

Denvir, C., Kinghan, J., Mant, J., & Newman, D. (2023). Legal aid and the future of access to justice (p. 288). Bloomsbury Academic.

Doğan, E., & Genç, H. D. (2021, March). Early-responding civil society and a late coming state: Findings from Turkey during the pandemic. In Nonprofit Policy Forum (Vol. 12, No. 1, pp. 127-146). De Gruyter.

Eden, C. A., Chisom, O. N., & Adeniyi, I. S. (2024). Education policy and social change: Examining the impact of reform initiatives on equity and access. International Journal of Science and Research Archive, 11(2), 139-146.

Elenbaas, L., & Mistry, R. S. (2021). Distributive justice in society and among peers: 8-to 14-year-olds' views on economic stratification inform their decisions about access to opportunities. Developmental Psychology, 57(6), 951.

Forde, S., Kappler, S., & Björkdahl, A. (2021). Peacebuilding, structural violence and spatial reparations in post-colonial South Africa. Journal of Intervention and Statebuilding, 15(3), 327-346.

Han, J., & Yang, Y. (2021). The socioeconomic effects of extreme drought events in northern China on the Ming dynasty in the late fifteenth century. Climatic Change, 164(3), 26.

Hasan, M. I., & Rupa, F. J. (2021). Digitalization of Bangladesh judiciary and access to justice. Asian Journal of Social Sciences and Legal Studies, 3(3), 49-58.

Heywood, M. (2021). Economic Policy and the Socio-Economic Rights in the South African Constitution, 1996–2021: Why Don't They Talk to Each Other?. Constitutional Court Review, 11(1), 1-37.

Jahn, J. L., Zubizarreta, D., Chen, J. T., Needham, B. L., Samari, G., McGregor, A. J., ... & Agénor, M. (2023). Legislating inequity: structural racism in groups of state laws and associations with premature mortality rates: study examines the combined harmful effects of state laws and structural racism's association with premature mortality rates. Health Affairs, 42(10), 1325-1333.

- Jolly, R. L., Hans, V. P., & Peck, R. S. (2022). Democratic renewal and the civil jury. Ga. L. Rev., 57, 79.
- Kalt, T. (2021). Jobs vs. climate justice? Contentious narratives of labor and climate movements in the coal transition in Germany. Environmental Politics, 30(7), 1135-1154.
- Khassawneh, O., & Abaker, M. O. S. M. (2022). Human resource management in the United Arab Emirates: Towards a better understanding. In HRM in the Global South: A critical perspective (pp. 103-128). Cham: Springer International Publishing.
- Lerner, M., & Rottman, J. (2021). The burden of climate action: How environmental responsibility is impacted by socioeconomic status. Journal of Environmental Psychology, 77, 101674.
- Leung, L., Hepburn, P., & Desmond, M. (2021). Serial eviction filing: Civil courts, property management, and the threat of displacement. Social Forces, 100(1), 316-344.
- Li, A., & Hu, A. (2021). Community contexts, socioeconomic status, and meritocratic beliefs and perceptions in China. Chinese journal of sociology, 7(3), 470-493.
- Liu, Y., Anser, M. K., & Zaman, K. (2021). Ecofeminism and natural resource management: justice delayed, justice denied. Sustainability, 13(13), 7319.
- Llanos, A. A., Ashrafi, A., Ghosh, N., Tsui, J., Lin, Y., Fong, A. J., ... & Heckman, C. J. (2023). Evaluation of inequities in cancer treatment delay or discontinuation following SARS-CoV-2 infection. JAMA Network Open, 6(1), e2251165-e2251165.
- Lord, B. D., Harris, A. R., & Ambs, S. (2023). The impact of social and environmental factors on cancer biology in Black Americans. Cancer Causes & Control, 34(3), 191-203.
- Melcarne, A., & Ramello, G. B. (2021). Is justice delayed justice denied? An empirical approach. International Review of Law and Economics, 65, 105953.
- Mentovich, A., Prescott, J. J., & Rabinovich-Einy, O. (2023). Legitimacy and online proceedings: Procedural justice, access to justice, and the role of income. Law & Society Review, 57(2), 189-213.
- Ogilvie, J. M., & Kisely, S. (2022). Examining the health and criminal justice characteristics for young people on compulsory community treatment orders: An Australian birth cohort and data linkage study. International Journal of Law and Psychiatry, 83, 101813.
- Presler, C. (2021). Mutual deference between hospitals and courts: how mandated reporting from medical providers harms families. Columbia Journal of Race and Law, 11(3), 733-766.
- Ritchie, L. A., & Long, M. A. (2021). Psychosocial impacts of post-disaster compensation processes: community-wide avoidance behaviors. Social Science & Medicine, 270, 113640.
- Shanahan, C. F., Steinberg, J. K., Mark, A., & Carpenter, A. E. (2022). The institutional mismatch of state civil courts. Columbia Law Review, 122(5), 1471-1537.
- Voukkali, I., Papamichael, I., Economou, F., Loizia, P., Klontza, E., Lekkas, D. F., ... & Zorpas, A. A. (2023). Factors affecting social attitude and behavior for the transition towards a circular economy. Sustainable Chemistry and Pharmacy, 36, 101276.
- Wang, J., & Hulme, C. (2021). Frailty and socioeconomic status: a systematic review. Journal of Public Health Research, 10(3), jphr-2021.

Wang, Y., Apte, J. S., Hill, J. D., Ivey, C. E., Johnson, D., Min, E., ... & Marshall, J. D. (2023). Air quality policy should quantify effects on disparities. Science, 381(6655), 272-274.