The effects of the reform of the judicial map on the functioning of civil justice

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Abstract

The paper evaluates the impact of the reform of the judicial map on the functioning of Italian civil justice. Implemented between 2013 and 2014, the reform abolished all branch offices and merged several small first-instance courts, substantially increasing the size of judicial districts and the scale at which civil justice services are provided. According to our findings, the reform led to a reduction in the demand for justice, plausibly due to higher access costs associated with increased distances to the courts. This decline was particularly pronounced in case types where claimants exercise greater discretion or where alternative dispute resolution mechanisms are available. On the supply side, the reform increased the number of cases resolved and reduced their average duration. These improvements were more pronounced in initially less efficient courts and in more complex case types, which benefited the most from the increased scale and specialization.

Keywords: civil justice, judicial geography, access to justice, courts' productivity, length of trials

JEL Classification: K4

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1 Introduction

Defining the optimal scale for public service provision is challenging due to the complex underlying trade-offs. An extremely limited jurisdiction may prevent the realization of economies of scale and specialization, leading to inefficiencies in public service delivery. In contrast, too large jurisdictions could cause congestion and reduce accessibility to service for local communities. This paper examines the provision of civil justice in Italy, analyzing the effects of a reform that increased the average size of first-instance courts by revising the judicial map. Although this exercise is not intended to define the optimal scale of judicial organization, it offers some guidance in this regard.

Civil justice in Italy has long been characterized by historical dysfunctions, especially in the extent of the backlog and the length of the trials. In the last 15 years, numerous interventions have been implemented to improve the efficiency of the system. Among the measures taken, the one with the broadest scope and the most profound organizational implications was the reform of the judicial map, implemented between 2013 and 2014, which led to the closure of 25 first-instance courts and 220 branch offices, centralizing their functions into the remaining 140 courts. The reform aimed to enhance the court's productivity by leveraging economies of scale and specialization among judges. Indirectly, it also increased the average distance from the reference court, raising the costs of access to justice for users in the affected areas.

To assess the effects of the reform, we reconstructed a harmonized historical series of incoming, resolved, and pending proceedings at the court and subject matter level, consolidating the data according to the new judicial geography.[1] Concerning the empirical strategy, we adopted a difference-in-differences approach, comparing the evolution of key outcome variables before and after the reform between a treatment group and a control group. Treated trials are those that, as a result of the reform, were reassigned to a new judicial office. This group includes all proceedings originally filed in the abolished courts, as well as those in subject matters that could previously be handled by branch offices now merged into the main court. The control group, instead, includes the proceedings in matters that were already under the jurisdiction of the main seat of the district court prior to the reform, as well as all proceedings, regardless of subject matter, handled by courts that were

[1]Specifically, data from the closed offices were aggregated and reclassified based on the post-reform judicial map to ensure consistent geographical units of analysis.

not affected by the reform and did not undergo any consolidation.

The results suggest that the reform increased the average distance to judicial offices and led to a decline in litigation before first-instance courts. Prior to the reform, the average distance to a branch office was 8 kilometers, and to a soon-to-be-closed court, 13 kilometers. After the reform, the average distance rose to 14 kilometers. Our estimates indicate that a 5-kilometer increase in distance is associated with a 6 percent reduction in the demand for justice. The increase in travel distance likely raised access costs, discouraging the initiation of new proceedings. This effect was more pronounced in subject matters such as tort liability (e.g., road accidents) and property disputes (e.g., condominium cases), where claimants typically have greater discretion in pursuing legal action and may resort to alternative forms of dispute resolution. In contrast, no significant impact was observed in areas such as family law (e.g., divorce proceedings) or business crises (e.g., judicial liquidations). These differences likely reflect the varying degree of discretion in initiating proceedings, the presence of legal mandates to litigate in certain cases, and the potential availability of non-judicial remedies.

On the supply side, the reform improved the courts' capacity to resolve cases and reduced trial duration. In affected courts and subject matters, the number of resolved cases increased by approximately 5 percent, and the average time expected to resolve proceedings (disposition time) decreased by a similar percentage. These improvements were particularly pronounced for more complex cases – i.e., those with longer average resolution times – and in courts that were less productive prior to the reform. The heterogeneous effects across courts and subject matters are plausibly explained by gains from economies of scale and increased specialization following the reorganization of judicial offices.[2] Notably, the positive supply-side effects appear to be driven primarily by the centralization of branch offices, suggesting that this component of the reform yielded clearer organizational benefits. In contrast, the centralization of closed courts may have entailed greater logistical and administrative challenges, limiting their overall contribution to improved performance.

This paper contributes to the broader literature on the optimal scale of public service provision by examining the trade-off between efficiency and specialization, on the one hand, and congestion and accessibility, on the other. Theoretical models suggest that economies

[2]Castro and Guccio (2018) use non-parametric techniques to analyse first instance courts in Italy, providing evidence of efficiency gains from the merger procedures. Coviello et al. (2019) show the positive impact of judge specialization on justice efficiency.

of scale can lower average service costs as the size of the service provider increases. Larger jurisdictions may also benefit from economies of specialization, allowing personnel to develop expertise that enhances service quality. However, beyond a certain scale, jurisdictions may have diminishing returns: coordination, communication, and control challenges can lead to inefficiencies and congestion. Moreover, larger jurisdictions may have lower territorial coverage, increasing access costs, particularly for those living in peripheral or rural areas. In the context of justice, this trade-off plays out between the potential gains from more specialized judges and administrative staff, who manage a higher volume and variety of cases, and the disadvantages stemming from greater physical distance from users and weaker knowledge of local social and economic conditions. The resulting relationship is commonly represented as an inverted U-shape (Peyrache and Zago, 2016): while increasing jurisdiction size initially yields efficiency and quality improvements, these benefits tend to decline or reverse beyond a certain threshold due to mounting coordination costs and concerns over equity and accessibility.

The empirical literature presents mixed results, with some studies showing that there are no efficiency gains (Blom-Hansen et al., 2016) as the size of the jurisdiction grows, while others highlight reductions in administrative costs (Duncombe and Yinger, 1993; Reingewertz, 2012; Blesse and Baskaran, 2016). In terms of public service output, according to Narasimhan and Weaver (2024), smaller jurisdictions are associated with better access to public goods and services.[3] In the justice sector, Espinosa et al. (2017) find that the reduction in the number of courts in France led to a drop in the demand for justice with negligible effects on other performance variables. Agrell et al. (2020) find that the merge of the Swedish district courts improved efficiency. Canzian and Ferrara (2025) observe negative effects on trial duration in Italy.[4] Overall, this heterogeneity in results is likely to stem from differences in the scale of public service aggregation and the empirical strategy used.

This paper offers two main contributions to the existing literature. First, from an empirical standpoint, we exploit variation at both the court and subject-matter levels,

[3]Rizzica (2013) shows that the increase in the supply of local university education in Italy led to a significant increase in female enrollment while leaving men's enrollment rate unchanged.

[4]These findings differ from ours for two main reasons: first, and most importantly, Canzian and Ferrara (2025) focus solely on the closure of 25 smaller courts, whereas we also consider the merging of 220 branch offices. In their analysis, the latter are included in the control group. Second, we examine a broader time frame and utilize more granular data, leveraging variability at both the court and subject levels.

in addition to the longitudinal dimension. This enables highly saturated specifications incorporating court-subject, subject-year, and court-year fixed effects. Such an approach allows us to control for unobserved local factors that may have influenced the decision to close a court – thus addressing potential endogeneity concerns – as well as for time-varying unobservables that could affect the outcome variables, such as changes in staff allocation following the reform. This represents a significant advancement in the identification strategy and strengthens the causal interpretation of our results.

Second, we broaden the scope of inquiry beyond the cost-saving dimension, which has been the primary focus of most empirical studies on public services consolidation (Gómez-Reino et al., 2023), to provide a more comprehensive evaluation of the reform. Specifically, we assess its impact across three key dimensions: accessibility of the service (measured by new case filings), operational efficiency (measured by the number of resolved cases), and service quality (proxied by trial duration).[5]

The paper is organized as follows. Section 2 provides some institutional and descriptive details on the judicial map reform. Section 3 outlines the data used and the empirical strategy adopted. Section 4 presents the results, distinguishing between the effects on demand and supply of justice. Section 5 provides concluding remarks.

2 The reform of the judicial map

Extensive empirical evidence shows that a well-functioning civil justice system is crucial to a territory's competitiveness and growth. Early empirical evidence leveraged institutional heterogeneity across countries, showing that contract enforcement and property rights positively impact investment and economic growth (Knack and Keefer, 1995), and capital markets development (Porta et al., 1997). In Italy, several papers have shown the justice system's effects on firm size (Giacomelli and Menon, 2017), participation in global value chains (Accetturo et al., 2017), financing conditions (Jappelli et al., 2005; Rodano, 2021), firms' turnover growth (Bamieh et al., 2025) and overall productivity and economic growth (Ciapanna et al., 2023).

The Italian justice system has long suffered from chronic inefficiencies, prompting

[5]Indeed, according to Marciano et al. (2019), the concepts of efficiency and efficacy have often been confused in previous literature.

numerous legislative reforms over the past decade to enhance its efficiency.[6] Among these measures, reorganizing the judicial districts was the most significant step in rationalizing the judicial system in Italy.

This reform concluded a long and complex historical process. Before Italy's unification, each independent state had its judicial system, with courts' boundaries reflecting historical and administrative divisions. With the unification and the enactment of the first Code of Civil Procedure of the Kingdom of Italy, the perimeters of the new judicial districts were established, partially preserving pre-unification boundaries while redesigning others to create a more uniform national system. Inspired by the Piedmontese model, the judicial map ensured a dense distribution of courts, including many in medium and small towns. Rationalization measures were introduced during the Fascist era, while in the aftermath of World War II, expansions in the supply of justice accommodated population growth and rising litigation.

The reform examined in this study originated with Law No. 148/2011, which delegated to the government the responsibility to reorganize the judicial offices, setting the related criteria. It mandated the merger of courts and the closure of branch offices. The branch offices, created at the end of the last century (Legislative Decree No. 51/1998), belonged to the court of first instance but were physically placed in a city other than their seat. They served to decongest the central offices and ensured that judicial offices were also present in peripheral and less populated areas.

The criteria for reorganizing the judicial offices set by the delegation included the extent of the territory, the number of inhabitants, the extent of the workloads, the geographical characteristics of the area, the infrastructure situation, and the degree of penetration of organized crime. In addition, two constraints were imposed: the maintenance of courts in the provincial capitals and at least three courts for each appeal district.[7] The Legislative Decree 155/2012 implemented the reform, guided by the recommendations of a ministerial

[6] On the demand side, the conditions for access to the system were modified in terms of rules and costs necessary to initiate proceedings, and alternative dispute resolution tools were introduced. On the supply side, in addition to reviewing the judicial map, investments were made, and the digitalization of trials was promoted. For a detailed discussion, see Giacomelli, Mocetti, et al. (2017). The interventions continued into the current decade with civil procedure reforms and strengthening the "Trial Office" to support judges' work (Cannella et al., 2024).

[7] The districts of the courts of appeal essentially coincide with the regions, except for Lombardy (Brescia and Milan), Campania (Naples and Salerno), Calabria (Catanzaro and Reggio Calabria), Sicily (Caltanissetta, Catania, Messina and Palermo) and Apulia (Bari and Lecce), while Valle d'Aosta is part of the district of Turin.

working group and the delegation law criteria, redesigning the boundaries of the courts of first-instance districts.[8]

The reform became effective in September 2013 and led to a significant rationalization of the presence of courts on the territory: the number of courts was reduced from 165 to 140, and all 220 branch offices were closed.[9] Among the remaining courts after the reform, 23 absorbed one or two abolished courts (Figure 1, left-hand panel), while 107 centralized at least one branch office and 56 two or more (Figure 1, right-hand panel). This restructuring mechanically increased the average court size, primarily by reducing the number of smaller courts (Figure 2).[10]

The geographical reorganization also increased the distance between municipalities and their judicial offices (Figure 3). Before the reform, branch offices were, on average, 8 kilometers away from the municipalities they served (weighting these distances by the population of each municipality), while courts were 13 kilometers away. Post-reform, the average distance to a court increased to 14 kilometers. The proportion of the population living more than 20 (50) kilometers from their judicial office rose from 9 to 21 percent (from 3 to 9 percent).

To simplify, the reform created three distinct scenarios, illustrated in Figure 4. Case A includes the courts unaffected by the reform, which neither merged with other courts (or parts of them) nor had branch offices (e.g., Nola, Ferrara, and Lodi, the three most populous catchment areas). Case B includes a subset of the courts affected by the reform, which absorbed one or more branch offices but did not merge with other courts (e.g., Rome and Milan, which centralized the Ostia, Cassano d'Adda, and Rho branch offices, respectively). Finally, case C identifies courts that merged with other courts (e.g., Genoa, which absorbed the Chiavari court). Some courts experienced a combination of cases B and C, absorbing both branch offices and merging with other courts (e.g,. Vicenza, which incorporated both

[8]The decree's explanatory report provides detailed data and cartographic reproductions of the courts' distances, illustrating the rationale behind court closures and mergers.

[9]At the same time of the revision of the judicial map, the court of first instance of Naples Nord, based in Aversa, was established. While this court formally preceded the reform of the judicial map, it had not previously existed as an ordinary court. The abolition of four courts in Abruzzo (Avezzano, Lanciano, Sulmona, and Vasto) and of the branch offices of the smaller islands (Ischia, Lipari, Portoferraio) has been postponed several times and not yet made effective.

[10]The courts which have centralized branch offices or merged other courts are those with a larger size: to date, the average catchment area of the courts unaffected by the reform is below 200,000 residents, while that of the courts expanded by the reform is nearly 500,000 on average.

the Schio branch office and the Bassano del Grappa court).[11]

The key difference between the court mergers and branch office closures lies in the jurisdictional scope of the reallocated cases. In a court merger, the merging court assumes jurisdiction over all litigation previously handled by the absorbed court. In a branch office closure, only the matters under the jurisdiction of the branch office are transferred. In contrast, cases already under the jurisdiction of the main seat remain unaffected (Figure 5). Before the reform, the courts' main seats were responsible for labor and social security cases and all cases requiring a panel of judges (and not monocratic formation, that is to say, a single judge), such as family law, succession, and company litigation.[12]

Thus, in courts classified under case B (e.g., Rome), family, labor, and social security proceedings remained unaffected since they were already handled at the main seat. However, matters such as contracts, enforcement, and summary proceedings – previously managed by branch offices – were transferred to the main seat following the reform.

3 Data and empirical strategy

3.1 Data and variables

The paper uses data on the flows (new and resolved cases) and stocks (pending cases) of civil proceedings in first-instance offices (courts). These data are disaggregated by court, subject matter (with approximately 50 categories), and year.[13] Using these data, we calculate the disposition time, which estimates the expected average time required to settle proceedings, by comparing the stock of pending cases at the end of the year with the flow of cases settled

[11] Another case observed includes courts which, net of any merger, transferred branch offices to other courts. For instance, before the reform, the Court of Venice had four branch offices, three of which it centralized, while the fourth one was merged with the Pordenone court. In our empirical analysis, we do not consider the branch office transferred since the geographical unit of reference is the post-reform courts, and the data have been reconstructed to be homogeneous in time with this partition of the territory.

[12] Branch office jurisdiction was defined by Article 48-quarter of the judicial system law (R.D. 12/1941), repealed by Legislative Decree 155/2012; collegial matters are listed in Article 50-bis of the Code of Civil Procedure.

[13] According to the Ministry of Justice classification, civil proceedings are categorized by source – SICID register of litigation and SIECIC register of enforcement and insolvency proceedings – and, within these, by subject matter. SICID refers to the Sistema Informativo Contenzioso Civile Distrettuale (District Civil Litigation Information System), while SIECIC denotes the Sistema Informativo Esecuzioni Civili Individuali e Concorsuali (Individual Civil Executions and Bankruptcy Information System). The cases involving the tutelary judge, preventive technical assessments, and the receipt and recording of sworn statements are excluded from the analysis.

within the year.[14]

Disaggregating data by subject matter, court, and year is crucial for identifying causal effects, as discussed in more detail in Section 3.2, and understanding case composition, given inherent differences in processing times across case types.[15]

The analysis covers the period from 2010 (the first available year for which it was possible to reconstruct the data series in a detailed and homogeneous manner) to 2019. While more recent data exist, this time window avoids external shocks such as the COVID-19 pandemic and subsequent judicial reforms.[16]

At the aggregate level, judicial efficiency improved considerably between 2010 and 2019. The number of pending cases fell by approximately 30 percent (Figure 6), primarily driven by the reduction in new case filings, which, in absolute terms, outpaced the decline in settled cases (Figure 7). In addition, the disposition time decreased from around 466 to 345 days, corresponding to a 26 percent drop (Figure 8), accompanied by a narrowing of disparities across courts (Figure 9).

3.2 The empirical strategy

This study employs the differences-in-differences method to assess the impact of judicial map reform. This approach measures the reform's effects (the treatment) by comparing changes in the dynamics of the variable of interest between two groups: proceedings affected by the reform (treated) and those unaffected (controls).

The analysis considers both a binary treatment specification (whether the court was affected or not) and a treatment intensity measure approximated by the population size of the merged judicial basin. The equation to be estimated is the following:

[14]The formula used to compute the disposition time is as follows: $\textit{Disposition time} = 365 * \frac{\textit{Pending Cases}}{\textit{Resolved Cases}}$. This measure approximated the case duration by assuming a constant resolution capacity and no new case filings. The disposition time is the primary indicator for international comparisons by the European Commission.

[15]For example, in 2019, the average case duration ranged from 2,750 days for bankruptcy cases to 860 days for ordinary civil cases, 360 days for employment cases, and 70 days for special summary procedures. Even within broad categories, processing times vary significantly: amongst ordinary civil cases, consensual separations lasted 130, judicial separations 650 days, while company law, industrial law, and contract disputes typically exceeded three years.

[16]The year 2020 was characterized by a significant drop in case inflow and resolutions due to lockdowns and reduced business and administrative activity. In 2022, significant investments were made in human resources, particularly through the expansion of the Trial Office. In 2023, civil procedure reforms introduced procedural simplifications and case management improvements.

$$y_{imt} = \alpha + \beta R_{imt} + \gamma_m + \delta_i + \epsilon_t + \zeta_{im} + \eta_{mt} + \theta_{it} + \mu_{imt} \quad (1)$$

where y_{imt} is the outcome variable for court i, subject matter m, and year t. We consider as outcomes the number of new cases, the number of resolved cases, and the disposition time to assess the effects of the reform on the demand for justice, the supply of justice, and the quality of justice, respectively.[17]

The treatment variable, R_{imt}, captures the reform's impact across courts, subject matters, and time. As discussed in Section 2, the treated cases include (i) all the proceedings in the merged courts and (ii) the proceedings previously under decentralized competence in branch offices that were absorbed. Table 1 presents descriptive statistics for the dependent variables, disaggregated by court type and subject matters.[18]

The baseline specification includes fixed effects – γ_m, δ_i, and τ_t – to control for unobserved, time-invariant characteristics of subject matters and courts, as well as for common shocks. To further address potential sources of bias, we estimate more saturated specifications that incorporate granular fixed effects: ζ_{mi}, η_{mt}, and θ_{it}. These allow us to control for a wide range of unobservable, time-varying shocks that may affect the outcome variable at different levels of aggregation. In particular, η_{it} absorbs court-year specific shocks such as changes in staff levels or composition, technological investments, or local economic shocks that could influence court performance. Similarly, θ_{mt} accounts for subject-year specific shocks, including policy interventions targeted at specific types of litigation (e.g., measures promoting out-of-court dispute resolution or discouraging claims in certain matters). This rich fixed-effects structure enhances the credibility of our identification strategy by addressing a broad set of confounding factors that could otherwise bias the estimated effects of the reform.

To analyze the reform's effects on the demand for justice, we also consider an indicator measuring, for each court and subject matter, the average distance between citizens and their assigned judicial office. This distance is calculated at the municipality level before

[17] In analysing case resolution, we account for a well-documented stylized fact: the number of newly filed cases is positively correlated with the number of cases resolved (Voigt, 2016). Mocetti et al. (2025) provide a theoretical framework that formalizes this relationship, showing that a decrease (increase) in the inflow of new cases leads to a corresponding decrease (increase) in the number of resolved cases.

[18] The analysis consolidates pre-reform data to reflect post-reform structures. For example, if Tribunal B absorbed Tribunal A, the pre-reform case count for B includes both A and B, while A is excluded from the analysis. As a result, the larger size of the treated courts (in terms of flows of proceedings) reflects the merging of branch offices and/or courts, not necessarily a larger initial size of the individual unit.

and after the judicial map reform. Average distances are then computed at the court level using the resident population as weights.

4 Results

4.1 The effects on the demand for justice

As anticipated in Section 2, the centralization of branch offices and the merger of the courts altered residents' access to justice in the affected municipalities.

Table 2 presents the regression results, as described in Section 3, using the (log of) number of new cases as outcome y_{mit}. Overall, the reform led to a statistically significant decline of 6.4 percent in the demand for justice (column 1). When distinguishing between the two forms of territorial reorganization (column 3), the merger of courts had a slightly stronger negative effect (6.4 percent) than that of branch offices (5.1 percent), presumably because the increase in the distance from judicial offices was higher. A similar pattern emerges when we consider a continuous measure of treatment intensity (column 5), i.e., the population percentage affected by merged branch offices or courts.

Columns 2, 4, and 6 include court-year fixed effects. While this specification prevents us from distinguishing between the effects of merging courts and centralizing branch offices, it allows us to control for other shocks affecting courts – such as unobservable changes in the level and composition of magistrates (both permanent and honorary) and administrative staff. The results remain robust, with relatively stable and highly significant coefficients.

To estimate the role of distance more directly, we introduce a continuous treatment variable for the distance from the judicial offices, obtained by population-weighting the distance between each municipality and the relevant judicial office (Table 3). Distance varies over time (increasing post-reform) across courts and subject matters. Pre-reform, it is calculated as the average distance between the municipalities and the relevant judicial office (branch office or the first-instance court). Post-reform, it refers to the weighted average distance from (new) courts. The distance (in kilometers) is included in the specification both in linear terms (columns 1 and 2) and in quadratic terms (columns 3 and 4). The most saturated specification reveals a negative and concave relationship between the litigation demand and the distance (column 4). In particular, a 5-kilometer increase in the distance is associated with a 6 percent drop in litigation, while 10- and 20-kilometers correspond to

declines of 10 and 14 percent, respectively.[19]

The results discussed thus far rely on the assumption of parallel pre-reform trends between treated and control groups and do not account for the dynamic evolution of the treatment effects. To address this, we extend the model in (1) by estimating event-time coefficients in the spirit of Autor (2003). For merged courts, the estimated coefficients remain close to zero in the pre-reform period, diverging only after the reform (Figure 10). In the case of branch office closures, we observe a reversal in the trend. The negative impact on the number of new proceedings materializes immediately, in line with an abrupt increase in access costs due to greater physical distance.[20]

We also examine the reform's impact across different areas of civil litigation. Figure 11 replicates the analysis of the model (1), estimating the heterogeneous effects of the reform across groups of subject matters. The matters for which the effects have been most significant, in terms of the magnitude and precision of the estimate, are *contracts*, *property rights*, and *torts*. These areas include very diverse types of litigation, with claims that may have different levels of merit. This includes proceedings – such as condominium cases in the context of property rights and small contracts and torts cases – where even a slight increase in access costs may deter the plaintiffs. By contrast, the reform had no significant effect on *family*, *insolvency*, and *employment law* cases, due to lower cost elasticity of demand in these matters.

In conclusion, the judicial map reform reduced access to justice, presumably due to the increased access costs associated with greater distances from judicial offices. The most affected matters suggest that the reduction in new cases involves, at least in part, matters characterized by litigation, for which, under certain conditions, the applicant may decide to forgo legal action.

4.2 The effects on the supply of justice

The reform of the judicial map was introduced to enhance court productivity through economies of scale and specialization. This section aims to assess the reform's impact on the supply of justice.

[19] See Chappe and Obidzinski (2014) for a theoretical model on the relationship between distance from the courts and demand for trials.

[20] We replicate this analysis using a propensity score matching approach to ensure a better balance between treated and control units and to reinforce the parallel trends assumption in the pre-reform period. The results, as shown in Figure 26, are confirmed.

Table 4 presents the regression results using the (log of) number of resolved cases as the dependent variable. Overall, the reform had a positive and significant effect on the justice supply, increasing the capacity to settle cases by 3.8 percent (column 1). If we distinguish between the two types of territorial reorganization, the merger of courts had no significant effect. In contrast, the merger of branch offices led to an increase of 9 percent in resolved cases (column 3). Similar results are obtained when using continuous measures of treatment intensity (column 5). The estimates are qualitatively confirmed when introducing court-year fixed effects (columns 2, 4, and 6). The centralization of the branch offices, which were already part of the main court, was probably easier to implement from an organizational and logistical standpoint compared to the merger of abolished courts.

To examine the reform's dynamic effect and rule out pre-existing divergent trends, we replicate the analysis to estimate anticipated and lagged effects. Figure 13 confirms that the centralization of branch offices drives the increase in case resolution capacity. No statistically significant differences existed between treated and control cases before the reform, but a positive gap emerged in subsequent years.[21]

To better understand the benefits of economies of scale and specialization, we explore the heterogeneous effects of the reform based on court size and subject matter. First, we classify the 140 courts into three categories based on the number of magistrates before and after the reform: small (fewer than 20 magistrates), medium (20 to 50 magistrates), and large courts (more than 50 magistrates). Before the reform, magistrates were distributed across a larger number of courts and branch offices, resulting in smaller average court sizes. Following the reform, 88 courts increased in size classification – 69 transitioned from small to medium, and 19 from medium to large. We then analyze the differential effects of the reform depending on the size change. Table 5 shows that the reform had a positive effect on courts of both size changes (column 1), suggesting widespread benefits from economies of scale without congestion costs for larger courts. Second, we examine whether the reform's impact differed based on pre-existing court productivity. We classify courts into two groups according to their productivity levels at the beginning of the period. Specifically, we introduce a *High productivity* indicator, which equals one if a court resolved more cases per judge than the median in 2010 and zero otherwise. We then interact this indicator

[21] See Figure 30 for a sensitivity analysis using the propensity score matching approach to ensure a better balance between treated and control units and to reinforce the parallel trends assumption in the pre-reform period.

with the reform variable to assess whether the effects differed based on the initial efficiency levels. The results indicate that the reform increased case resolution across all courts, but the effect was smaller for those that were already more productive at the beginning of the period (column 2). This finding suggests that less efficient courts benefited the most from economies of scale and specialization following the merger.

Finally, we analyze whether the impact of the reform was heterogeneous across different subject matters. Figure 14 shows that the reform had positive effects on most matters, particularly on *torts* and *insolvency*, while the impact was negligible for *company law*, *civil enforcement*, and other *special summary proceedings*. This observed heterogeneity is significantly correlated with the proceedings' length (correlation coefficient: 0.7), suggesting that the reform's effects were greater for more complex matters requiring longer resolution times.

In conclusion, the territorial reorganization and the size increase of judicial offices have significantly improved the courts' ability to settle cases. The observed heterogeneity across courts and subjects suggests that these improvements stem from economies of scale and specialization.

4.3 The effects on the length of trials

The available data allow us to analyze not only inflows – which approximate the demand for justice – and outflows – which reflect a court's output – but also trial duration, which best approximates the quality of judicial services.[22]

Table 6 presents regression results using the (log of) disposition time – the estimated number of days required to resolve proceedings – as the dependent variable. Overall, the reform has a negative (i.e., reducing) effect on trial duration, though the effect is not statistically significant (column 1). This aggregate result masks two opposing effects: the centralization of branch offices is associated with a reduction in disposition time, while the merger of courts appears to increase it (column 3).[23] Similar findings emerge when using continuous measures of treatment intensity (column 5). When introducing court-year fixed

[22]Measuring the quality of the justice service is complex due to the multiple dimensions involved and the difficulty of quantifying them. The most widely used variable in the literature is trial duration, as it is easier to measure than other dimensions and because timely decisions are a prerequisite for effective legal protection.

[23]This result is consistent with that of Canzian and Ferrara (2025). Pezone (2023) uses the reform as an instrument for variation in the trial length.

effects, the estimated reduction in disposition time becomes statistically significant across all specifications, with an estimated decrease of approximately 5 percent (columns 2, 4, and 6).

Figure 16 replicates the estimation exercise of anticipated and lagged effects for disposition time. The results confirm that the reduction in trial duration is mainly driven by the centralization of branch offices, with no evidence of pre-existing trends before the reform.[24]

To further investigate the mechanisms behind the observed improvement in judicial quality, we analyze the heterogeneous effects across different subject matters (Figure 17). The results align closely with the estimated effects on settled cases (Figure 14), reinforcing the hypothesis that economies of scale and specialization played a role in enhancing the efficiency of the judicial system.

5 Conclusions

The optimal scale for delivering judicial services is essential for ensuring a fair and efficient justice system. This decision directly impacts citizens' access to justice and the courts' overall functioning. Establishing a balance between the proximity to services and operational efficiency while maintaining service quality is a complex challenge. This study offers insights from evaluating the effects of the judicial map reform implemented in Italy between 2013 and 2014.

Our findings indicate that the increased distance to judicial offices from the reform raised access costs, discouraging the initiation of new proceedings. While this effect was observed only for a subset of the population and specific subject matters, its interpretation remains ambiguous. The decline in litigation could reflect a reduction in pretextual cases, but it could also signal that higher access costs deterred meritorious cases. However, the concentration of this effect in subject matters where claimants exercise greater discretion in filing lawsuits or where alternative dispute resolution is more feasible suggests that, at least in part, the decline in demand primarily affected less critical cases.

On the supply side, the territorial reorganization of judicial offices enhanced case

[24] See Figure 33 for a sensitivity analysis using the propensity score matching approach to ensure a better balance between treated and control units and to reinforce the parallel trends assumption in the pre-reform period.

resolution and reduced trial length. The results are heterogeneous across subject matters and are more pronounced for the more complex cases, suggesting that the impact has been driven by larger economies of scale and specialization. The positive effects were mainly related to the centralization of branch offices, while the merger of courts did not yield efficiency gains, likely due to greater logistical and administrative challenges.

This paper offers two key contributions to the literature. First, it provides a comprehensive evaluation of a large-scale judicial reform, extending the analysis beyond fiscal savings to include effects on accessibility, efficiency, and efficacy. Second, from an empirical standpoint, it exploits variation across courts, subject matters, and over time, enabling a robust identification strategy that accounts for a broad set of unobserved shocks and endogeneity concerns.

Overall, this study's findings suggest that the benefits of reorganization outweigh the costs, although certain conditions are necessary for its full effects to materialize.

Figures and Tables

A Figures

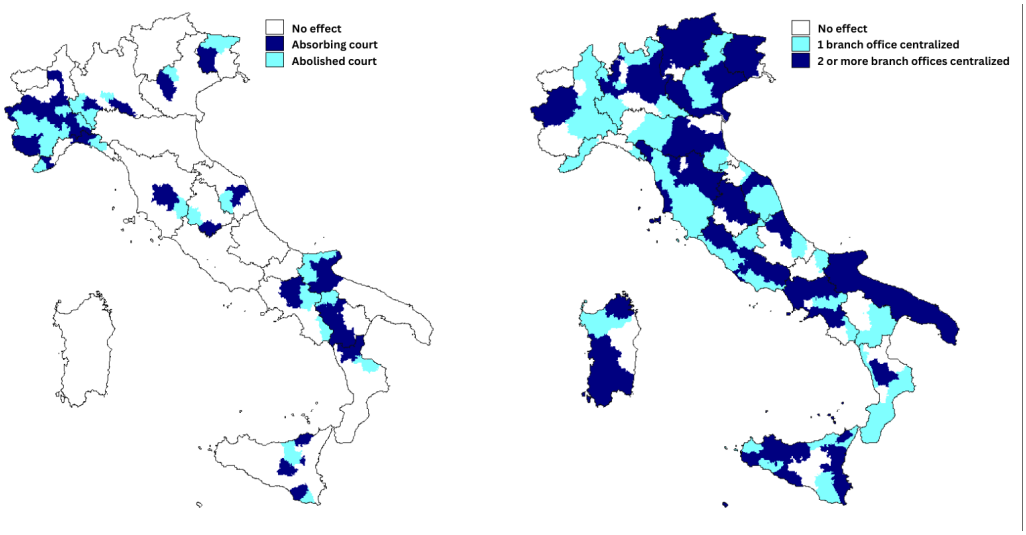


Figure 1: The reform of judicial map

Notes: In the left-hand panel, we distinguish between the courts that merged other courts (*absorbing court*), the courts that have been abolished (*abolished court*), and the courts that have remained unchanged (*no effect*). In the right-hand panel, we distinguish courts that have centralized a branch office *(1 branch office centralized)*, two or more branch offices (*2 or more branch offices centralized*), and none (*no effect*).

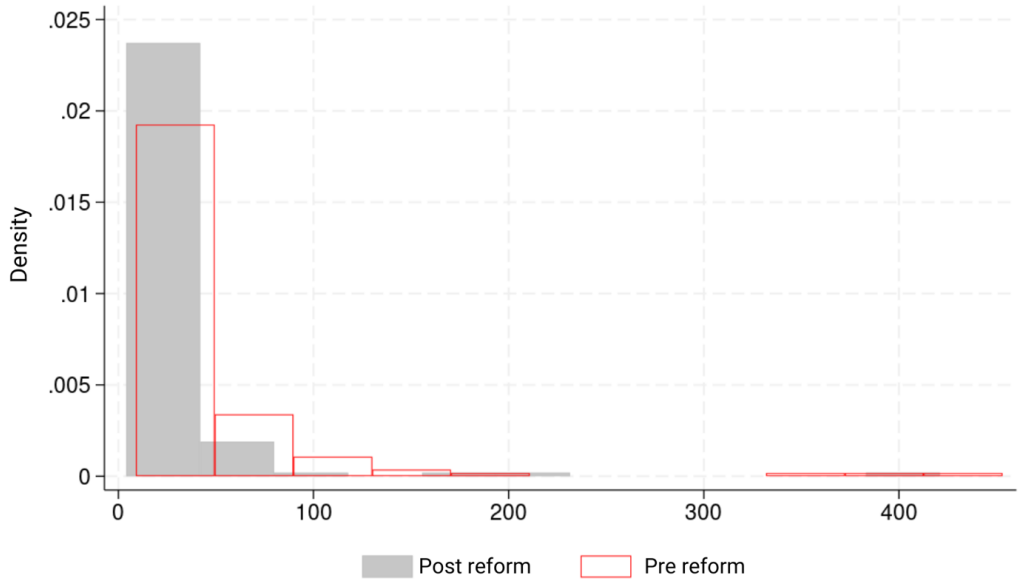


Figure 2: Number of judges per court, pre and post-reform

Notes: The figure presents the histogram of the number of judges at the court level before and after the reform.

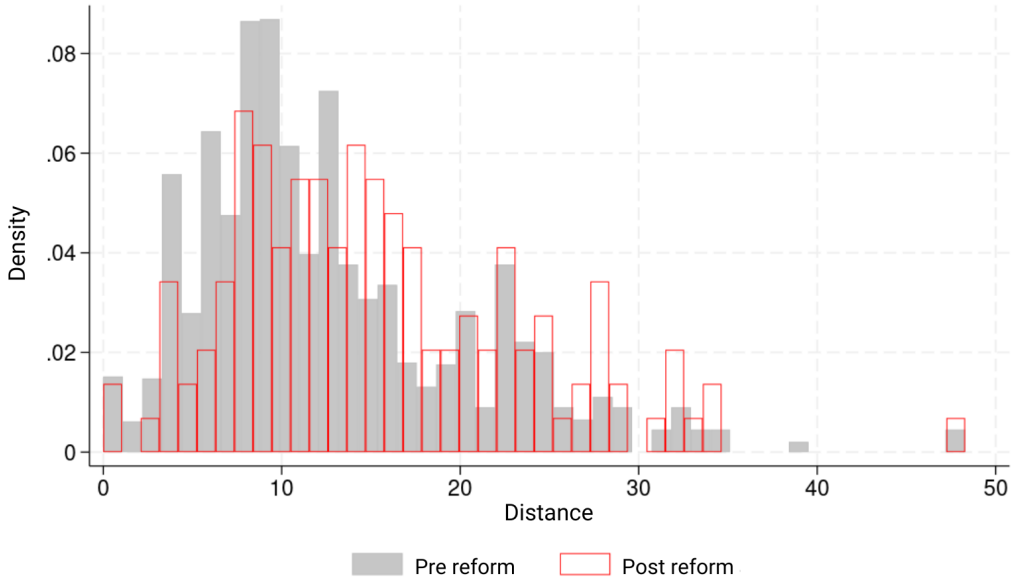


Figure 3: Average distance between municipalities and reference court, pre and post-reform

Notes: The figure presents the histogram of the average distance between the municipalities and the reference existing court before and after the reform. The distance is weighted by the municipality's population.

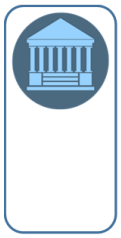
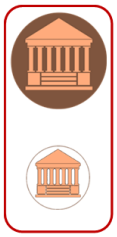
Subject matter → Time ↓	A: control courts	B: treated courts (merging branch offices)	C: treated courts (merging courts)
Pre-reform			
Post-reform			

Figure 4: Treated and control courts

Notes: The figure outlines the possible scenarios for courts following the judicial map reform. Case A includes courts that remained unaffected by the reform. Case B consists of courts that absorbed former branch offices, while Case C includes courts that merged other courts.

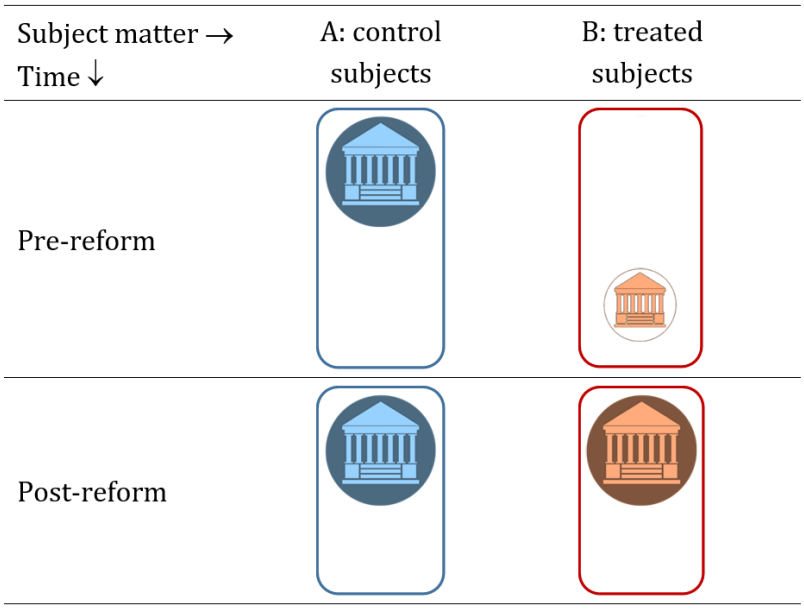


Figure 5: Treated and control subject matters

Notes: The figure outlines possible scenarios following the judicial map reform for subject matters. Case A includes subject matters that were processed by the court both before and after the reform. Case B includes subject matters that, prior to the reform, fell under the jurisdiction of branch offices and were subsequently transferred to the relevant court as a result of the reform.

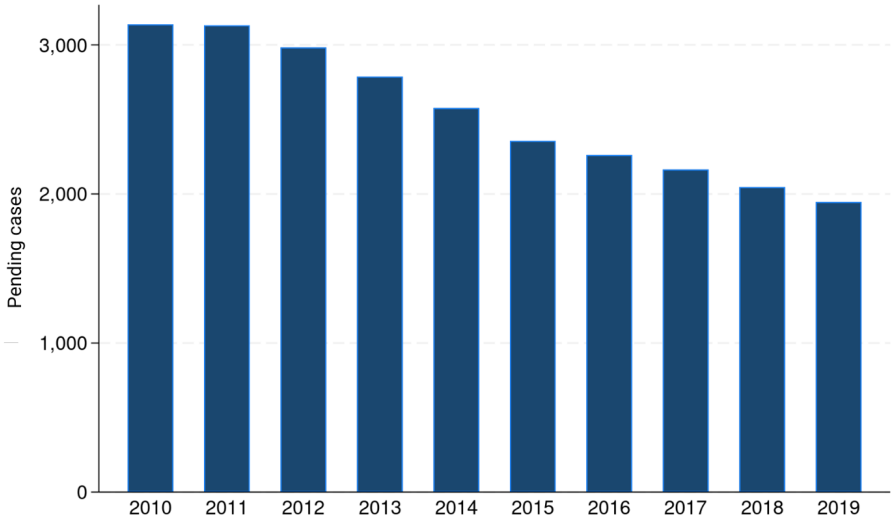


Figure 6: The number of pending civil cases in the courts of first instance

Notes: The figure shows the total number of pending civil cases in courts of first instance from 2010 to 2019 (SICID and SIECIC registers). Preliminary technical assessments (*accertamento tecnico preventivo*) are excluded. Data are measured in thousands of units. Source: calculations based on data from the Ministry of Justice.

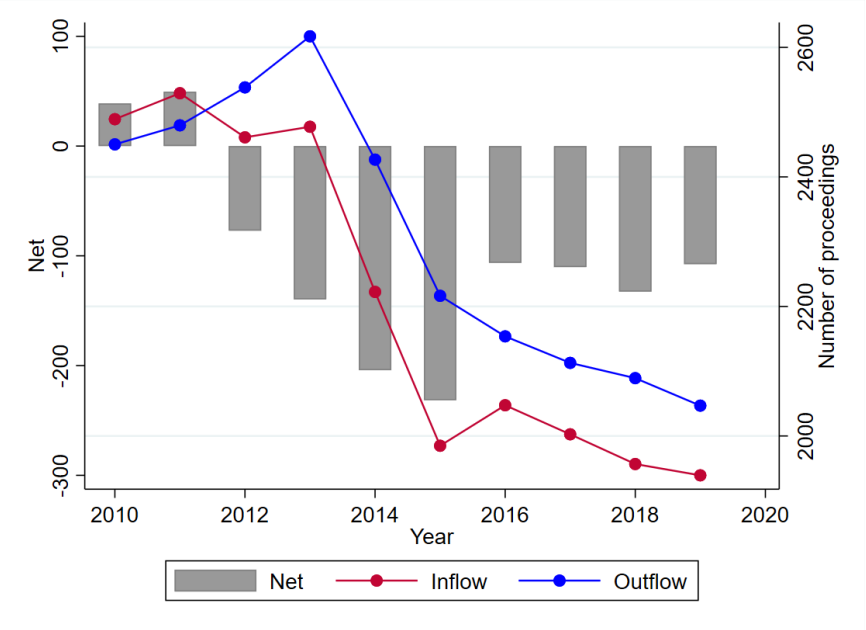


Figure 7: Flows of civil proceedings in first-instance courts

Notes: The figure shows the total civil proceedings (SICID and SIECIC registers) inflow - new proceedings - and outflow - resolved proceedings - (right axis) and the balance (left axis) in the courts from 2010 to 2019. Preliminary technical assessments (*accertamento tecnico preventivo*) are excluded. Data are measured in thousands of units. Source: calculations based on data from the Ministry of Justice.

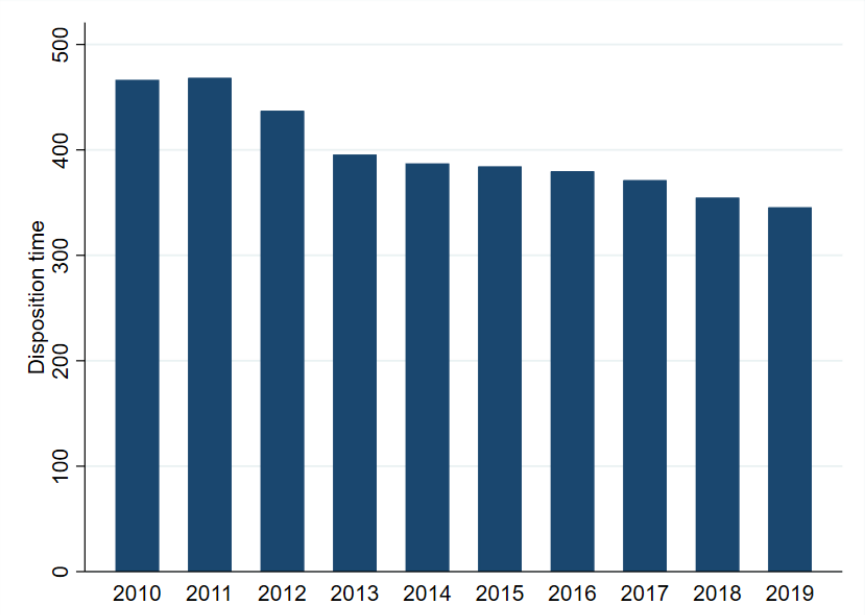


Figure 8: The disposition time of civil proceedings in the courts of first instance

Notes: The figure shows the annual average of the disposition time, weighted by the cases defined in the courts of first instance from 2010 to 2019. Total civil proceedings (SICID and SIECIC registers) are included, and preliminary technical assessments (*accertamento tecnico preventivo*) are excluded. Data are measured in days. Source: calculations based on data from the Ministry of Justice.

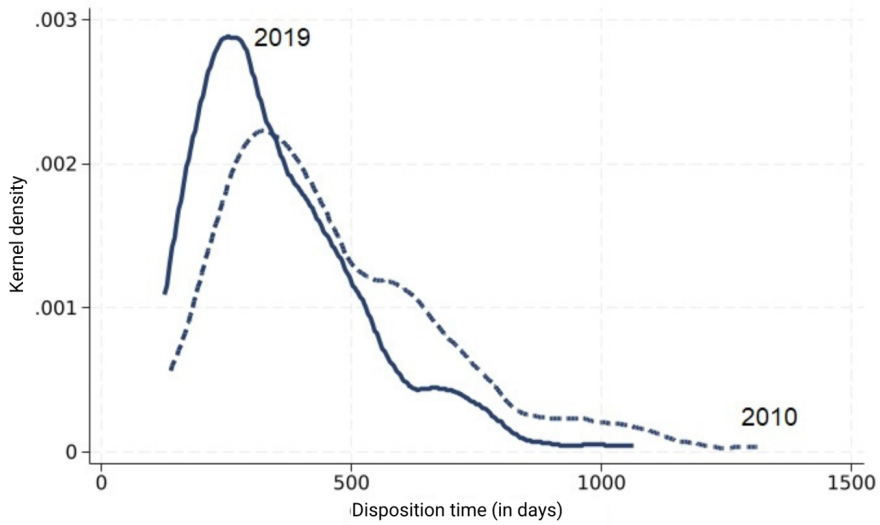


Figure 9: The distribution of the disposition time of civil proceedings in 2010 and 2019

Notes: The figure shows the distribution of the disposition time, weighted by the number of resolved cases, in the courts of first instance in 2010 and 2019. Total civil proceedings (SICID and SIECIC registers) are included, and preliminary technical assessments (*accertamento tecnico preventivo*) are excluded. Data are measured in days. Source: calculations based on data from the Ministry of Justice.

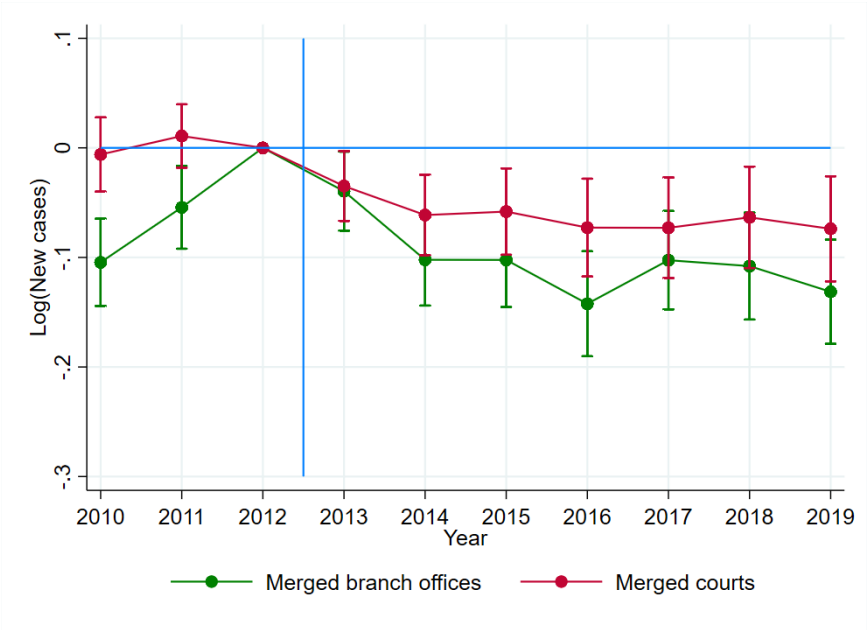


Figure 10: Dynamic effect of the reform on the demand of justice

Notes: The figure shows the estimates of the regression of the logarithm of the *New Cases* on the treatment variables *Merged Branch Offices* and *Merged Courts*, for each $t \in [-3, 6]$, where t is calculated as the distance from the year of treatment. The specification controls for court-, year-, subject matter-, subject matter-court- and subject-matter-year-fixed effects. 95% confidence intervals calculated by using robust and clustered (at the subject matter-court level) standard errors are reported.

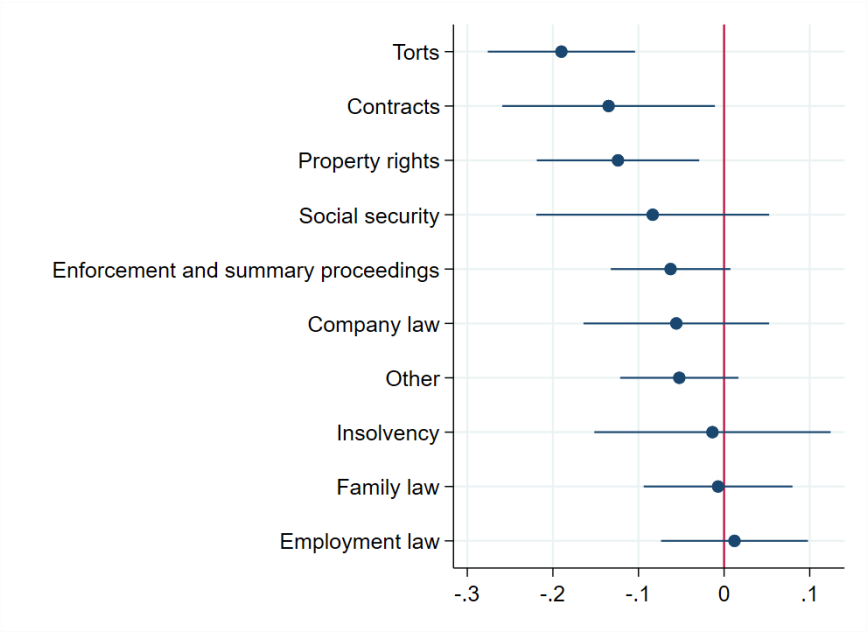


Figure 11: The effect of the reform on the demand for justice by groups of subject matters

Notes: The figure shows the estimates of the regression of the logarithm of the *New Cases* on the treatment variable *Treated subject matter in treated court*, separately for each group of subject matters. The specification controls for court-, year-, subject matter-, subject matter-court- and subject-matter-year-fixed effects. 95% confidence intervals calculated by using robust and clustered (at the subject matter-court level) standard errors are reported.

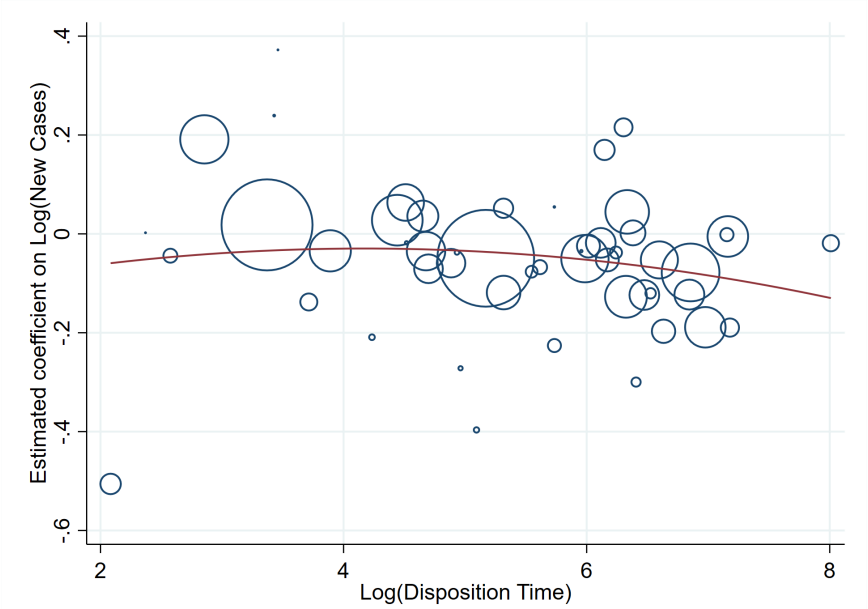


Figure 12: Correlation between estimated effect on the demand for justice and the case disposition time

Notes: The figure shows the correlation between the estimates of the regression of the logarithm of the *New Cases* at the subject matter level, and the subject's disposition time. The estimates are obtained controlling for court-, year-, subject matter-, subject matter-court- and subject-matter-year-fixed effects. The observations are weighted by the number of new cases.

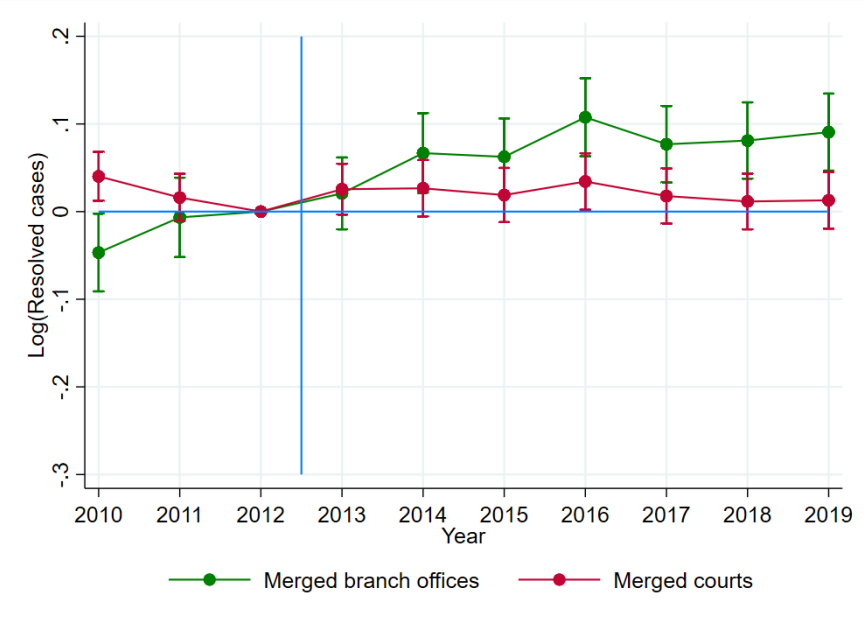


Figure 13: Dynamic effect of the reform on the supply of justice

Notes: The figure shows the estimates of the regression of the logarithm of the *Resolved cases* on the treatment variables *Merged Branch Offices* and *Merged Courts*, for each $t \in [-3, 6]$, where t is calculated as the distance from the year of treatment. The specification controls for court-, year-, subject matter-, subject matter-court- and subject-matter-year-fixed effects. 95% confidence intervals calculated by using robust and clustered (at the subject matter-court level) standard errors are reported.

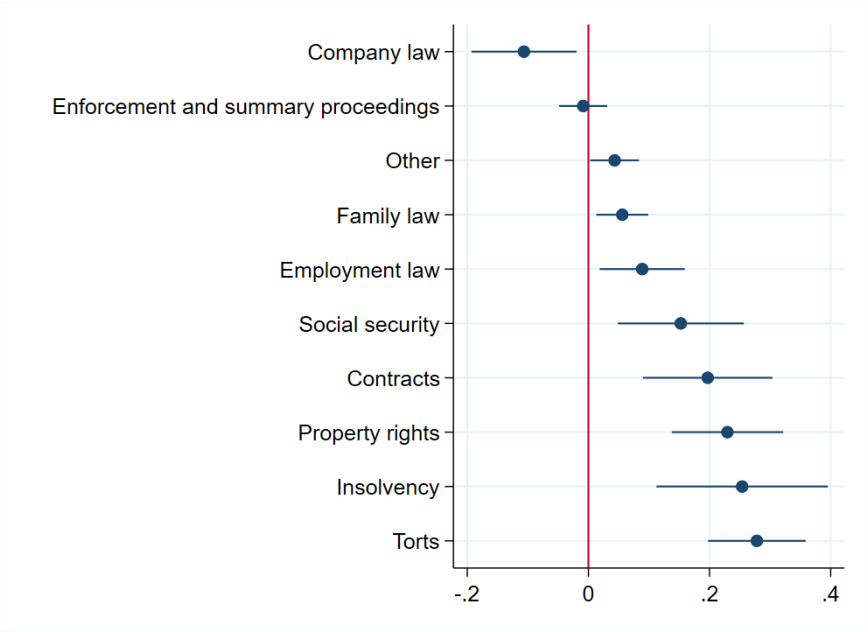


Figure 14: The effect of the reform on the supply of justice by groups of subject matters

Notes: The figure shows the estimates of the regression of the logarithm of the *Resolved Cases* on the treatment variable *Treated subject-matter in treated court*, separately for each group of subject matters. The specification controls for court-, year-, subject matter-, subject matter-court- and subject-matter-year-fixed effects. 95% confidence intervals calculated by using robust and clustered (at the subject matter-court level) standard errors are reported.

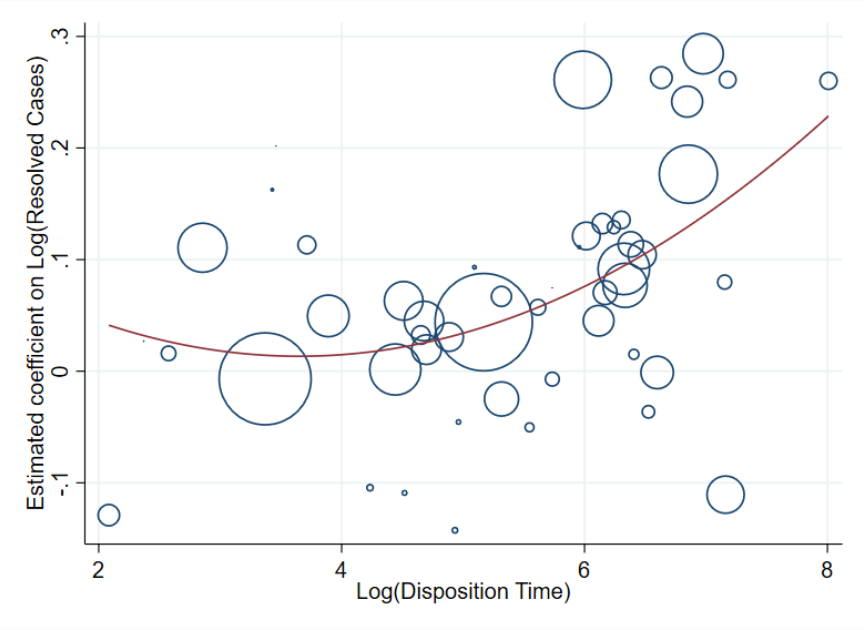


Figure 15: Correlation between estimated effect on the supply of justice and the case disposition time

Notes: The figure shows the correlation between the estimates of the regression of the logarithm of the *Resolved Cases* at the subject matter level, and the subject's disposition time. The estimates are obtained controlling for court-, year-, subject matter-, subject matter-court- and subject-matter-year-fixed effects. The observations are weighted by the number of resolved cases.

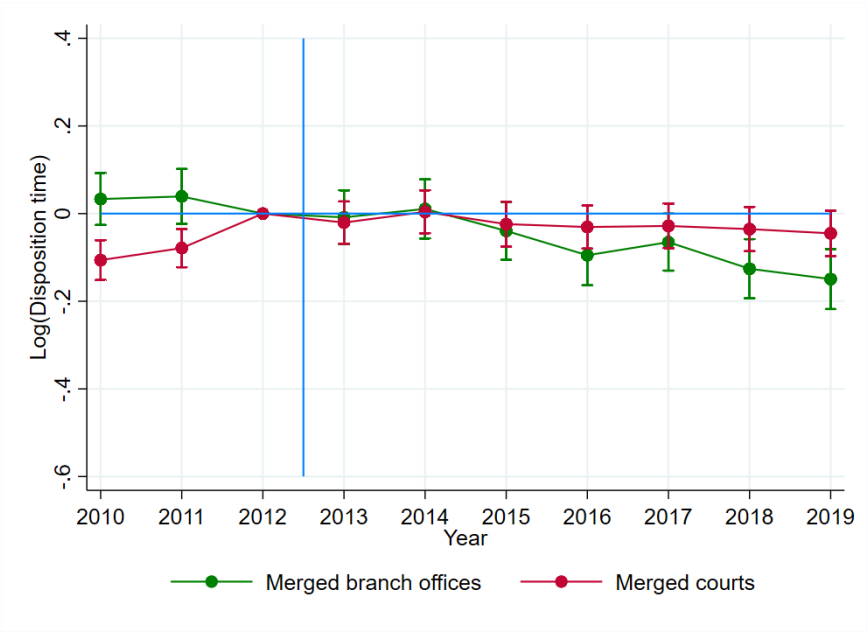


Figure 16: Dynamic effect of the reform on the length of trials

Notes: The figure shows the estimates of the regression of the logarithm of the *Disposition Time* on the treatment variables *Merged branch offices* and *Merged courts*, for each $t \in [-3, 6]$, where t is calculated as the distance from the year of treatment. The specification controls for court-, year-, subject matter-, subject matter-court- and subject-matter-year-fixed effects. 95% confidence intervals calculated by using robust and clustered (at the subject matter-court level) standard errors are reported.

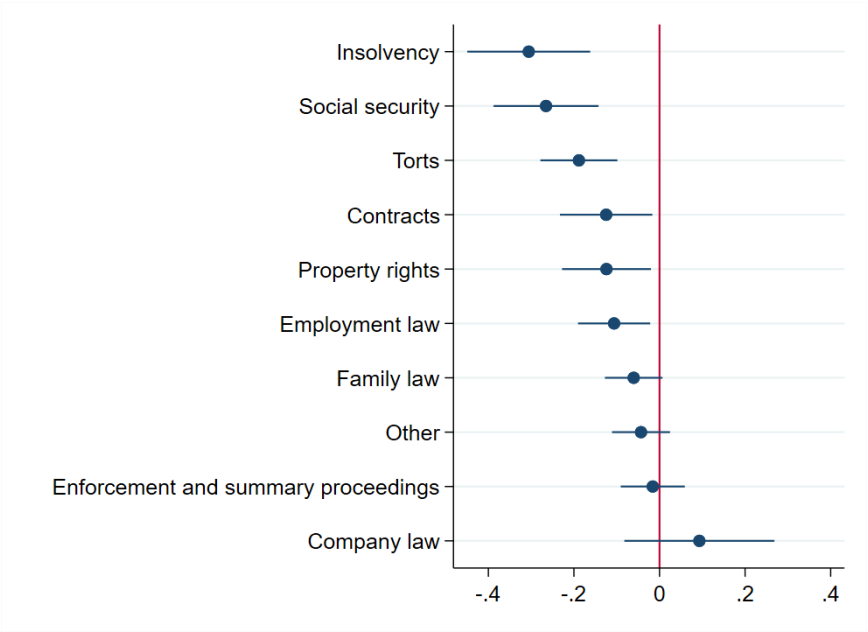


Figure 17: The effect of the reform on the length of trials by groups of subject matters

Note: The figure shows the estimates of the regression of the logarithm of the *Disposition Time* on the treatment variable *Treated subject matter in treated court*, separately for each group of subject matters. The specification controls for court-, year-, subject matter-, subject matter-court- and subject-matter-year-fixed effects. 95% confidence intervals calculated by using robust and clustered (at the subject matter-court level) standard errors are reported.

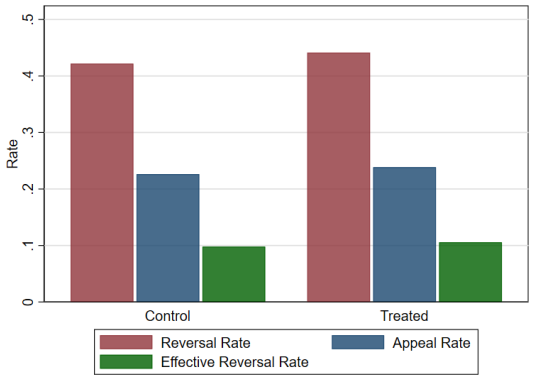


Figure 18: Trend in demand of justice

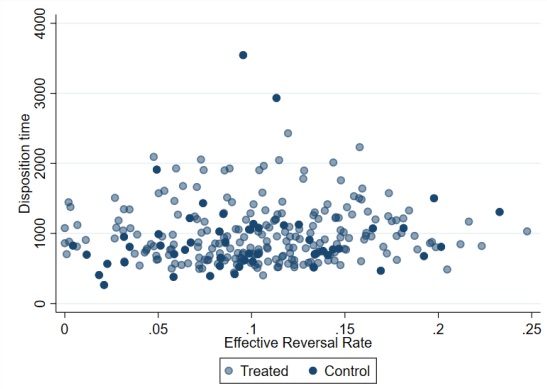


Figure 19: Appeal and Reversal rate & length of trials by treatment

Note: The left panel shows the average *Reversal*, *Appeal* and *Effective Reversal rate* in the control and treated courts. The right panel shows the scatter of the *Effective Reversal rate* and the *Disposition time*, separately for treated and control units. The *Effective Reversal rate* is computed as the product of reversal and appeal rate. The data on appeal and reversal rates are from Cugno et al. (2022) and are available cross-sectionally for each court only in the subjects of contracts and property rights. Disposition time is measured in the post-reform period. The correlation coefficients for *Effective Reversal rate* and *Disposition time* are 0.03 for treated units and 0.13 for control units.

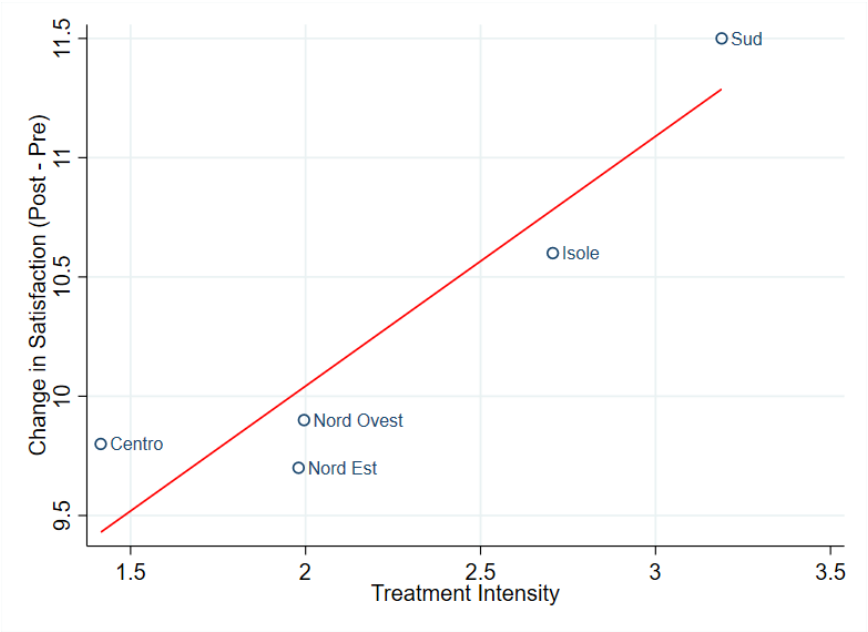


Figure 20: Users' justice satisfaction around reform time

Note: The figure plots the change in users' satisfaction with the Italian justice system and the treatment intensity at the geographical area level. The satisfaction data from "ISTAT Multipurpose Survey on Households: Aspects of Daily Life" are available at the geographical area level (Nord Est, Nord Ovest, Centro, Sud, Isole) for 2013, and 2023. The change in satisfaction is computed as the difference between the pre-reform statistics, based on 2013, and the post-reform are based on 2023. The difference between post- and pre-reform satisfaction is reported in brackets. Geographical areas are ranked by treatment intensity, where treatment intensity is measured as the number of courts centralized, weighted by the population under the jurisdiction of the court.

B Tables

	Treated court		Control court	
Variable	Treated subject matter	Control subject matter	Treated subject matter	Control subject matter
New cases	691	216	506	161
	(1934)	(548)	(2890)	(684)
Resolved cases	682	237	510	171
	(1932)	(782)	(2699)	(709)
Disposition time	775	694	680	610
	(836)	(1178)	(698)	(1045)

Table 1: Descriptive statistics

Notes: The table reports the mean and the standard deviation (in brackets) measured in 2012 for the following variables: *New cases*, *Resolved cases* and *Disposition time*, separately for treated and control matters, in treated and control courts. The treated courts have been the subject of the reform and thus merged the branch offices already in their district and/or other courts (or their branch offices). The subjects being treated were those under the branch offices' responsibility before the reform.

	Ln(New cases)					
	(1)	(2)	(3)	(4)	(5)	(6)
Reform	-0.064***	-0.057**				
	(0.016)	(0.023)				
Centralization of branch offices			-0.051***	-0.070***		
			(0.016)	(0.026)		
Merger of courts			-0.064***			
			(0.016)			
% Population from branch offices					-0.055***	-0.075***
					(0.017)	(0.026)
% Population from merged courts					-0.078***	
					(0.021)	
Observations	70,890	70,890	70,890	70,890	70,890	70,890
Average new cases	49.90	49.90	49.90	49.90	49.90	49.90
R-square	.96	.96	.96	.96	.96	.96
FE court, subject matter, year	Yes	Yes	Yes	Yes	Yes	Yes
FE subject matter x year, court x subject matter	Yes	Yes	Yes	Yes	Yes	Yes
FE court x year	No	Yes	No	Yes	No	Yes

Table 2: Effect of the reform on the demand for justice

Notes: *** p<0.01, ** p<0.05, * p<0.1 SE clustered at subject matter-court level. The variable *Reform* is a binary indicator equal to 1 if both the subject matter and the court were affected by the reform and is defined only for the years following the reform (0 otherwise). The variables *Centralization of branch offices* and *Merger of courts* are also binary indicators, equal to 1 if the subject matter was affected by the reform and the court either absorbed former branch offices or merged with other courts (or their sections), respectively. These variables are also defined only for the years following the reform (0 otherwise). Finally, the variables *% Population from branch offices* and *% Population from merged courts* capture the proportion of the population—and, by extension, the approximate workload—relative to the court's size, coming from centralized branch offices and merged courts (or their branches), respectively. These variables are likewise defined only for the years following the reform (0 otherwise). All specifications include court, subject matter, year, subject matter x year, and court x subject matter fixed effects. Columns (2)-(4)-(6) also include court x year fixed effects.

	Ln(New cases)			
	(1)	(2)	(3)	(4)
Distance	-0.004***	-0.002	-0.008**	-0.013***
	(0.001)	(0.002)	(0.004)	(0.005)
$\text{Distance}^2/100$			0.010	0.031**
			(0.008)	(0.012)
Observations	70,890	70,890	70,890	70,890
Average new cases	49.90	49.90	68.72	68.72
R-square	.96	.96	.96	.96
FE court, subject matter, year	Yes	Yes	Yes	Yes
FE subject matter x year, court x subject matter	Yes	Yes	Yes	Yes
FE court x year	No	Yes	No	Yes

Table 3: Effect of the reform on the demand for justice

Notes: *** p<0.01, ** p<0.05, * p<0.1 SE clustered at subject matter-court level. The variable *ln(distance)* is a continuous variable that approximates, at the subject matter-court level, the average distance between the court and the municipalities. Pre-reform, it is calculated, at the subject matter level, as the average distance between the municipalities and the relevant judicial office (branch office or the first-instance court). Post-reform, it refers to the weighted average distance from the new court seats. All specifications include court, subject matter, year, subject matter x year, and court x subject matter fixed effects. Columns (2)-(4) also include court x year fixed effects.

	Ln(Resolved cases)					
	(1)	(2)	(3)	(4)	(5)	(6)
Reform	0.038***	0.054***				
	(0.009)	(0.015)				
Centralization of branch offices			0.090***	0.041**		
			(0.013)	(0.017)		
Merger of courts			0.002			
			(0.009)			
% Population from branch offices					0.092***	0.052***
					(0.014)	(0.017)
% Population from merged courts					-0.006	
					(0.012)	
Observations	70,890	70,890	70,890	70,890	70,890	70,890
R-square	.98	.98	.98	.98	.98	.98
Average resolved cases	51.94	51.94	51.94	51.94	51.94	51.94
FE court, subject matter, year	Yes	Yes	Yes	Yes	Yes	Yes
FE subject matter x year, court x subject matter	Yes	Yes	Yes	Yes	Yes	Yes
FE court x year	No	Yes	No	Yes	No	Yes
Control newly filed cases	Yes	Yes	Yes	Yes	Yes	Yes

Table 4: Effect of the reform on the supply of justice

Notes: *** p<0.01, ** p<0.05, * p<0.1 SE clustered at subject matter-court level. The variable *Reform* is a binary indicator equal to 1 if both the subject matter and the court were affected by the reform and is defined only for the years following the reform (0 otherwise). The variables *Centralization of branch offices* and *Merger of courts* are also binary indicators, equal to 1 if the subject matter was affected by the reform and the court either absorbed former branch offices or merged with other courts (or their sections), respectively. These variables are also defined only for the years following the reform (0 otherwise). Finally, the variables *% Population from branch offices* and *% Population from merged courts* capture the proportion of the population—and, by extension, the approximate workload—relative to the court's size, coming from centralized branch offices and merged courts (or their branches), respectively. These variables are likewise defined only for the years following the reform (0 otherwise). All specifications include court, subject matter, year, subject matter x year, and court x subject matter fixed effects. Columns (2)-(4)-(6) also include court x year fixed effects.

	Ln(Resolved cases)	
	(1)	(2)
Reform: court from small to middle size	0.037**	
	(0.016)	
Reform: court from middle to large size	0.064***	
	(0.023)	
Reform		0.086***
		(0.019)
Reform × High productivity		-0.060***
		(0.016)
Observations	70,890	70,890
R-square	.98	.98
Average resolved cases	51.94	51.94
FE court, subject matter, year	Yes	Yes
FE subject matter x year, court x subject matter, court x year	Yes	Yes
Control newly filed cases	Yes	Yes

Table 5: Heterogeneity of the effect of the reform on the supply of justice by court's size and productivity

Notes: *** p<0.01, ** p<0.05, * p<0.1 SE clustered at subject matter-court level. The variable *Reform: court from small to middle size* is a binary indicator equal to 1 if the court was affected by the reform and its size changed from small to medium as a result. It is defined only for the years following the reform (0 otherwise). Similarly, the variable *Reform: court from middle to large size* is equal to 1 if the reform led to a change in the court's size from medium to large, and it is also valued only for the years following the reform (0 otherwise). A small court is defined as one with fewer than 20 magistrates, a medium court has between 20 and 50 magistrates, and a large court has more than 50 magistrates. The variable *Reform* is a general indicator equal to 1 if the court was affected by the reform and is valued only for the years following the reform (0 otherwise). The variable *High productivity* is equal to 1 if the number of cases settled per magistrate in 2010 was above the median. All specifications include court, subject matter, year, subject matter x year, court x subject matter, and court x year fixed effects.

	Ln(Disposition Time)					
	(1)	(2)	(3)	(4)	(5)	(6)
Reform	-0.012	-0.065***				
	(0.015)	(0.022)				
Centralization of branch offices			-0.091***	-0.045*		
			(0.020)	(0.026)		
Merger of courts			0.036**			
			(0.015)			
% Population from branch offices					-0.084***	-0.055**
					(0.021)	(0.026)
% Population from merged courts					0.064***	
					(0.020)	
Observations	59,387	59,387	59,387	59,387	59,387	59,387
R-square	.87	.88	.87	.88	.87	.88
Average Disposition Time	298.87	298.87	298.87	298.87	298.87	298.87
FE court, subject matter, year	Yes	Yes	Yes	Yes	Yes	Yes
FE subject matter x year, court x subject matter	Yes	Yes	Yes	Yes	Yes	Yes
FE court x year	No	Yes	No	Yes	No	Yes
Control newly filed cases	Yes	Yes	Yes	Yes	Yes	Yes

Table 6: Effect of the reform on the length of trials

Notes: *** p<0.01, ** p<0.05, * p<0.1 SE clustered at subject matter-court level. The variable *Reform* is a binary indicator equal to 1 if both the subject matter and the court were affected by the reform and is defined only for the years following the reform (0 otherwise). The variables *Centralization of branch offices* and *Merger of courts* are also binary indicators, equal to 1 if the subject matter was affected by the reform and the court either absorbed former branch offices or merged with other courts (or their sections), respectively. These variables are also defined only for the years following the reform (0 otherwise). Finally, the variables *% Population from branch offices* and *% Population from merged courts* capture the proportion of the population—and, by extension, the approximate workload—relative to the court's size, coming from centralized branch offices and merged courts (or their branches), respectively. These variables are likewise defined only for the years following the reform (0 otherwise). All specifications include court, subject matter, year, subject matter x year, court x subject matter, and court x year fixed effects.

Appendix

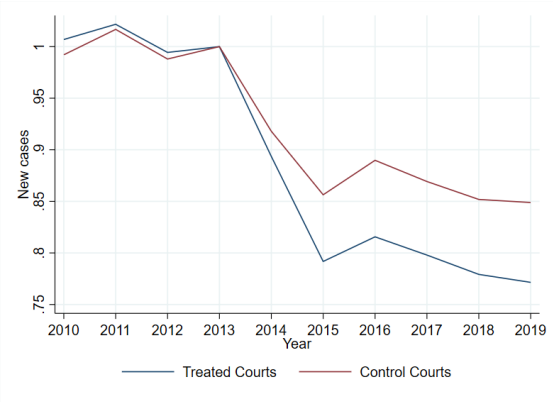


Figure 21: Trend in demand of justice

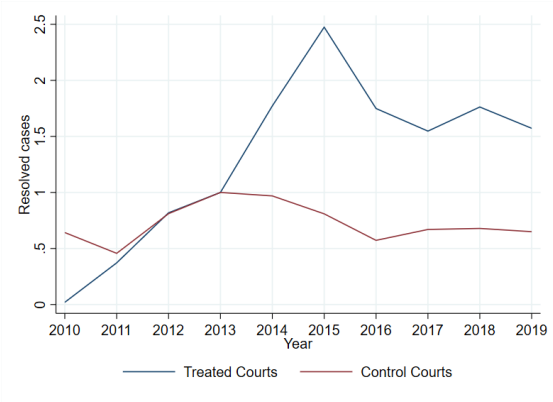


Figure 22: Trend in supply of justice

Notes: The figures show the trend in *New Cases* (left panel) and *Resolved Cases* (right panel) from 2010 to 2019, normalized by the 2013 level, separately for treated and control courts. The levels of *Resolved Cases* plotted are residualized by the levels of *New Cases*.

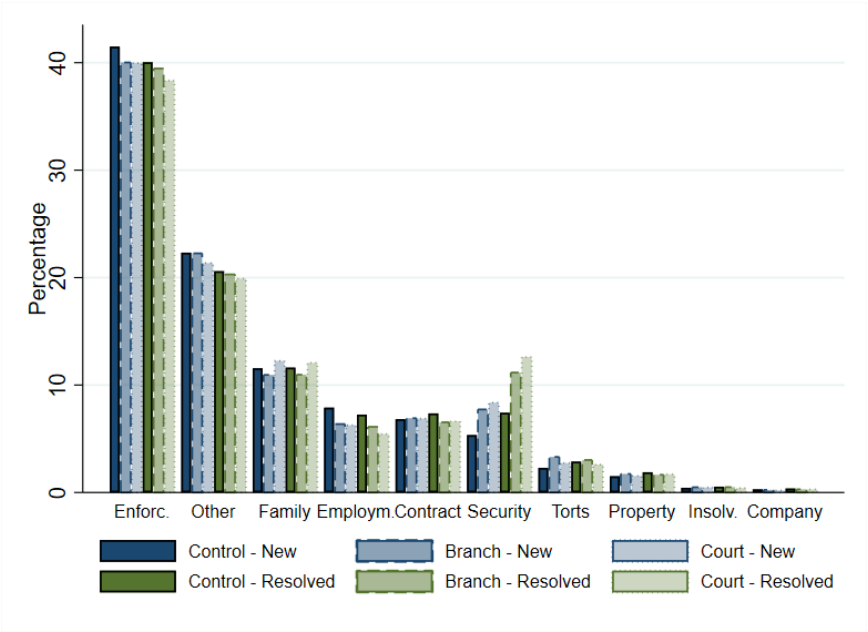


Figure 23: Subject share for demand and supply of justice by treatment type before the reform

Notes: The figure shows the share of *New* and *Resolved cases* for each subject within treatment type (*Control, Branch, Court*). Courts that both absorbed branch offices and merged with other courts are classified as *Court*. The statistics are computed using pre-reform figures (2010-2012).

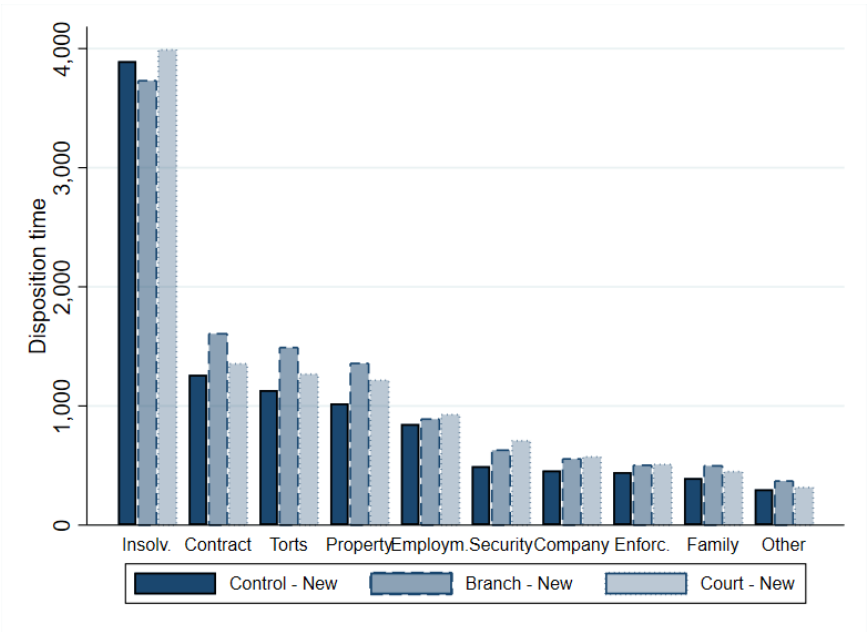


Figure 24: Length of justice by treatment type before the reform

Notes: The figure shows the *Disposition time* for each subject within treatment type (*Control, Branch, Court*). The statistics are computed using pre-reform figures (2010-2012).

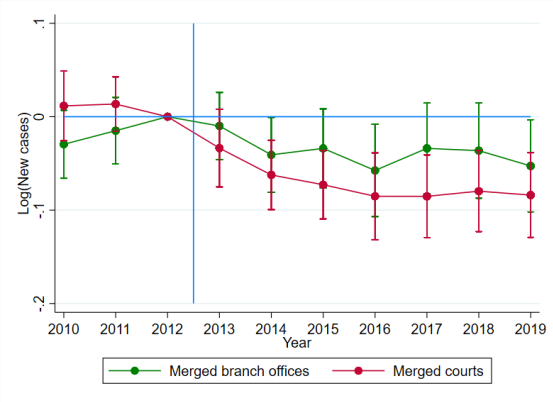


Figure 25: Dynamic effect of the reform on the demand of justice, with Kernel propensity score matching

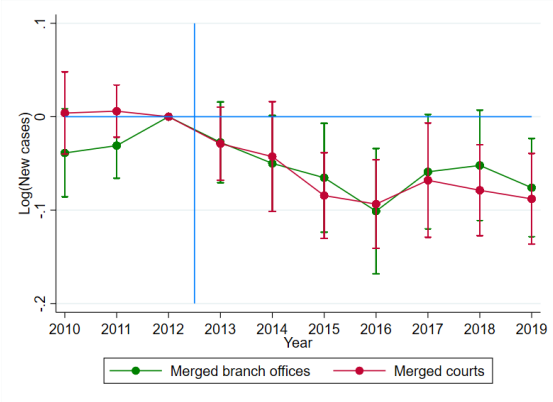


Figure 26: Dynamic effect of the reform on the demand of justice, with nearest neighbor matching

Notes: The figures show the estimates of the propensity score weighted regression of the logarithm of the *New Cases* on the treatment variables *Merged branch offices* and *Merged courts*, for each $t \in [-3, 6]$, where t is calculated as the distance from the year of treatment. The specification controls for court-, year-, subject matter-, subject matter-court- and subject-matter-year-fixed effects. 95% confidence intervals calculated by using robust and clustered (at the subject matter-court level) standard errors are reported. The *left* and *right* panels propose two different matching strategies. In the *left* panel, weights are constructed using kernel propensity score matching on pre-treatment trends and level in the *New Cases*, and on subject fixed effects; in the *right* panel, nearest neighbor matching 1:5 on pre-treatment trends and level in the *New Cases*, and on subject fixed effects is employed.

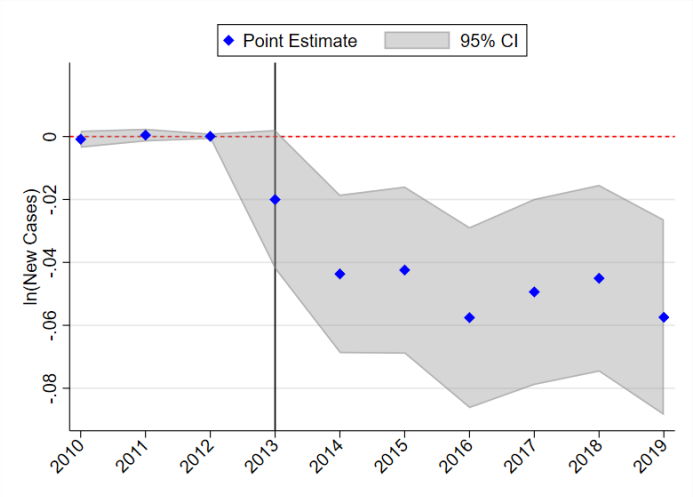


Figure 27: Dynamic effect of the reform on the demand of justice, with synthetic difference-in-differences

Notes: The figure shows the estimates of the synthetic difference-in-difference regression of the logarithm of the *New Cases* on the treatment variables *Merged branch offices* and *Merged courts*, for each $t \in [-3, 6]$, where t is calculated as the distance from the year of treatment. The specification controls for court-, year-, subject matter-, subject matter-court- and subject-matter-year-fixed effects. 95% confidence intervals calculated using cluster bootstrap with 100 replications, where clusters are defined at the court-subject level. The synthetic difference-in-differences method follows Arkhangelsky et al. (2021).

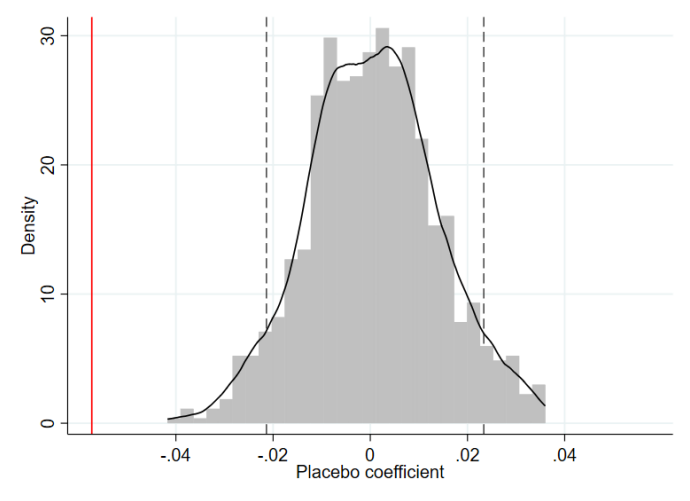


Figure 28: Placebo test of effect of the reform on the demand of justice

Notes: The figure plots the distribution of the 1,000 placebo estimates of the regression of the logarithm of *New Cases* on the treatment variable *Reform*. 5^{th} and 95^{th} percentiles (dashed lines) refer to the distribution of placebo coefficients. The red line indicates the true estimate. The placebo test randomly reassigns treatment status across subjects-courts while maintaining the original proportion of treated units. The test accounts for the full regression specification including court, year, and subject matter fixed effects, as well as subject matter-court, subject matter-year, and court-year fixed effects, with standard errors clustered at the subject matter-court level.

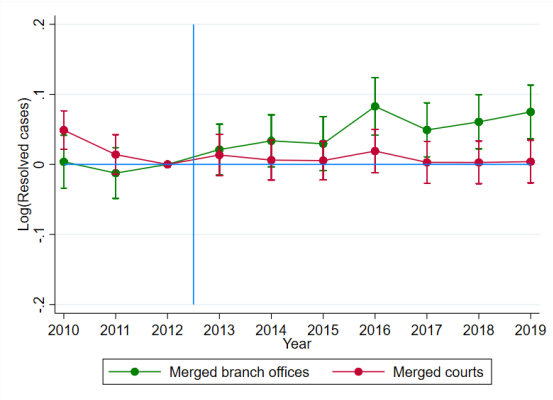


Figure 29: Dynamic effect of the reform on the supply of justice, with propensity score matching

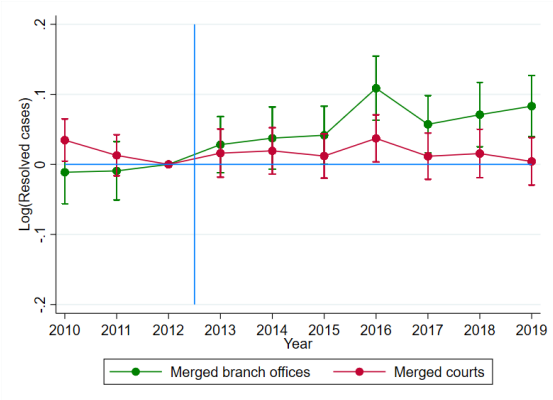


Figure 30: Dynamic effect of the reform on the supply of justice, with nearest neighbor matching

Notes: The figures show the estimates of the propensity score weighted regression of the logarithm of the *Resolved Cases* on the treatment variables *Merged branch offices* and *Merged courts*, for each $t \in [-3, 6]$, where t is calculated as the distance from the year of treatment. The specification controls for court-, year-, subject matter-, subject matter-court- and subject-matter-year-fixed effects. 95% confidence intervals calculated by using robust and clustered (at the subject matter-court level) standard errors are reported. The *left* and *right* panels propose two different matching strategies. In the *left* panel, weights are constructed using kernel propensity score matching on pre-treatment trends and level in the *Resolved Cases*, and on subject fixed effects; in the *right* panel, nearest neighbor matching 1:5 on pre-treatment trends and level in the *Resolved Cases*, and on subject fixed effects is employed.

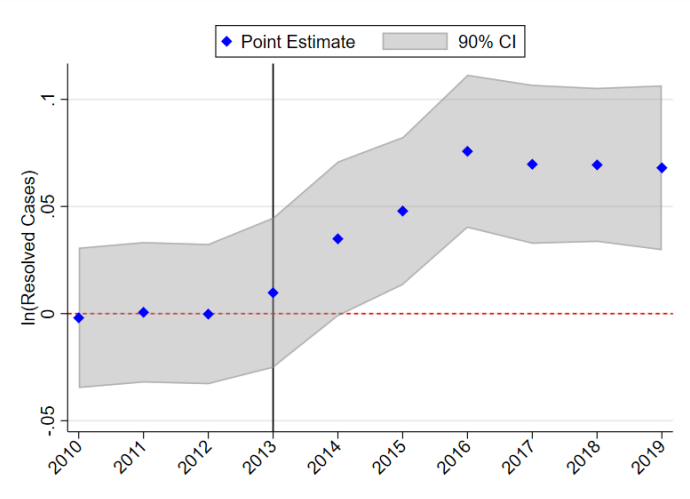


Figure 31: Dynamic effect of the reform on the supply of justice, with synthetic difference-in-differences

Notes: The figure shows the estimates of the synthetic difference-in-difference regression of the logarithm of the *Resolved Cases* on the treatment variables *Merged branch offices* and *Merged courts*, for each $t \in [-3, 6]$, where t is calculated as the distance from the year of treatment. The specification controls for court-, year-, subject matter-, subject matter-court- and subject-matter-year-fixed effects. 95% confidence intervals calculated using cluster bootstrap with 100 replications, where clusters are defined at the court-subject level. The synthetic difference-in-differences method follows Arkhangelsky et al. (2021).

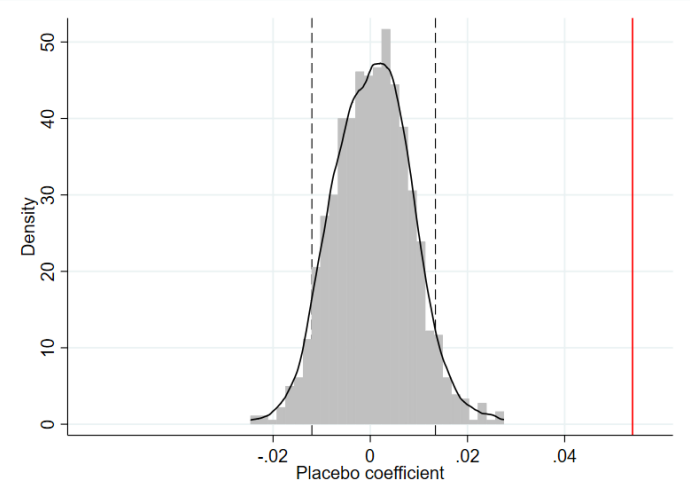


Figure 32: Placebo test of effect of the reform on the supply of justice

Notes: The figure plots the distribution of the 1,000 placebo estimates of the regression of the logarithm of *Resolved Cases* on the treatment variable *Reform*. 5^{th} and 95^{th} percentiles (dashed lines) refer to the distribution of placebo coefficients. The red line indicates the true estimate. The placebo test randomly reassigns treatment status across subjects-courts while maintaining the original proportion of treated units. The test accounts for the full regression specification including court, year, and subject matter fixed effects, as well as subject matter-court, subject matter-year, and court-year fixed effects, with standard errors clustered at the subject matter-court level.

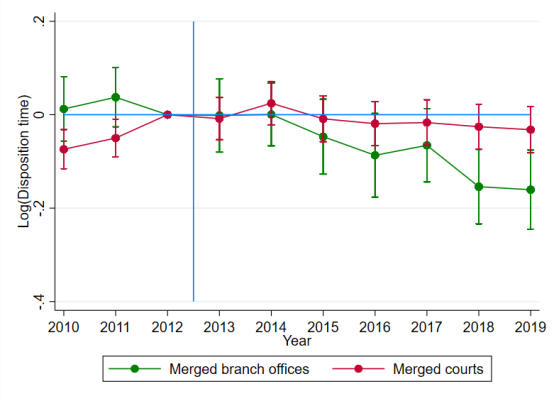


Figure 33: Dynamic effect of the reform on the length of trials, with propensity score matching

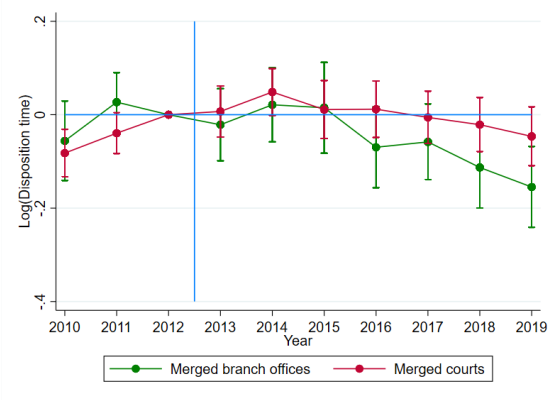


Figure 34: Dynamic effect of the reform on the length of trials, with nearest neighbor matching

Notes: The figures show the estimates of the propensity score weighted regression of the logarithm of the *Disposition Time* on the treatment variables *Merged branch offices* and *Merged courts*, for each $t \in [-3, 6]$, where t is calculated as the distance from the year of treatment. The specification controls for court-, year-, subject matter-, subject matter-court- and subject-matter-year-fixed effects. 95% confidence intervals calculated by using robust and clustered (at the subject matter-court level) standard errors are reported. The *left* and *right* panels propose two different matching strategies. In the *left* panel, weights are constructed using kernel propensity score matching on pre-treatment trends and level in *New Cases*, *Resolved Cases*, and *Disposition Time*, and on subject fixed effects; in the *right* panel, nearest neighbor matching 1:5 on pre-treatment trends and level in the *New Cases*, *Resolved Cases*, and *Disposition Time*, and on subject fixed effects is employed.

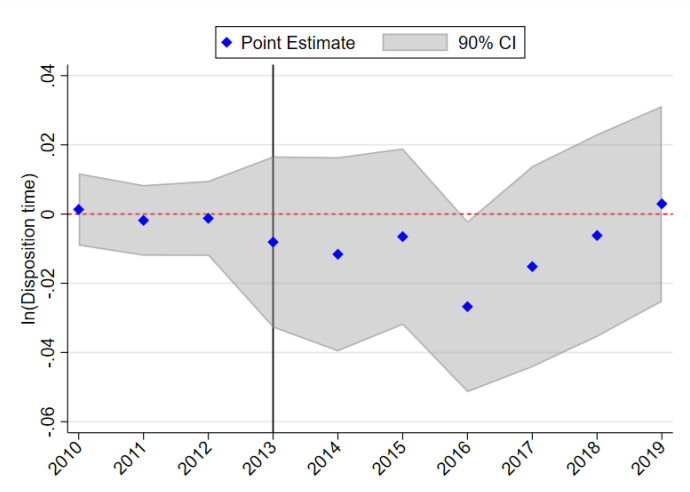


Figure 35: Dynamic effect of the reform on the length of trials, with synthetic difference-in-differences

Notes: The figure shows the estimates of the synthetic difference-in-difference regression of the logarithm of the *Disposition Time* on the treatment variables *Merged branch offices* and *Merged courts*, for each $t \in [-3, 6]$, where t is calculated as the distance from the year of treatment. The specification controls for court-, year-, subject matter-, subject matter-court- and subject-matter-year-fixed effects. 95% confidence intervals calculated using cluster bootstrap with 100 replications, where clusters are defined at the court-subject level. The synthetic difference-in-differences method follows Arkhangelsky et al. (2021).

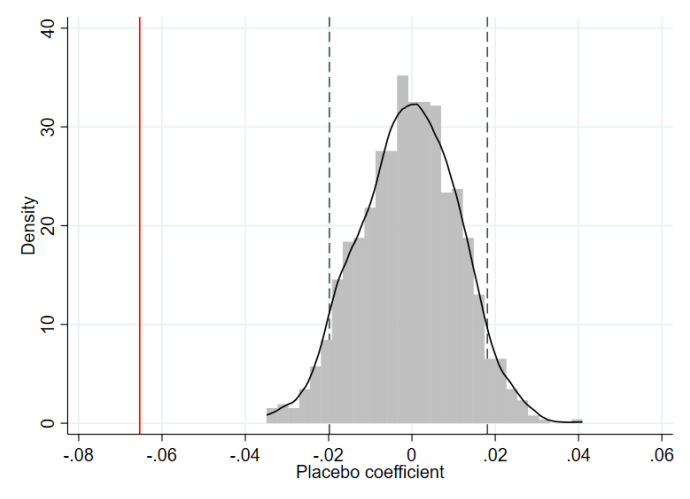


Figure 36: Placebo test of effect of the reform on the length of trials

Notes: The figure plots the distribution of the 1,000 placebo estimates of the regression of the logarithm of *Disposition Time* on the treatment variable *Reform*. 5^{th} and 95^{th} percentiles (dashed lines) refer to the distribution of placebo coefficients. The red line indicates the true estimate. The placebo test randomly reassigns treatment status across subjects-courts while maintaining the original proportion of treated units. The test accounts for the full regression specification including court, year, and subject matter fixed effects, as well as subject matter-court, subject matter-year, and court-year fixed effects, with standard errors clustered at the subject matter-court level.

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