# Minority in the courtroom: Did public trail exacerbate the ethnic Discrimination in the court?

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#### 1. Introduction

In many developed democracies, ethnic and religious minority groups often face an imbalance of justice (Alesina and La Ferrara 2014; Rehavi and Starr 2014; Ulmer and Johnson 2004). Racial biases in sentencing can emerge within justice systems when the majority group perceives a threat, whether physical or economic, from minority populations. This leads to stereotypes and prejudice among jury members, prosecutors, and judges, who are typically members of the dominant group (Anwar, Bayer, and Hjalmarsson 2012; Lim, Silveira, and Snyder 2016; Rehavi and Starr 2014).

This article aims to expand on this line of research by examining ethnic discrimination in criminal sentencing outcomes in China. China is a multiethnic state where the Han ethnic group comprises 91% of the population. The Chinese Communist Party (CCP) recognizes 55 ethnic minority groups and has implemented policies, such as regional autonomy and policy privileges, following the Soviet model to address the needs of these minorities.

The objective of this paper is to document the presence of ethnic-based discrimination within China's judicial system and shed light on its underlying causes. We investigate a unique policy experiment that utilizes information technology (IT) to enhance judicial transparency and explore its impact on reducing racial disparities. By analyzing the mechanisms at play, we gain insights into the role of IT in public affairs.

To accomplish our goal, we obtained civil court judgments involving individual litigants from China Judgements Online, a distinctive platform that publishes legal documents from all courts in China. Our analysis focuses on judgments issued between 2015 and 2016, which provide detailed information on civil litigation, including litigation outcomes and characteristics of the litigants. This comprehensive dataset enables us to study racial bias in litigations. Additionally, we examine the effects of a nationwide open justice reform that introduced surveillance technologies to enhance the visibility of litigation proceedings in courtrooms. Starting in September 2016, the Supreme Court mandated that all courts in China livestream trials on a centralized online platform, making the recorded proceedings accessible to the public. The reform

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was implemented gradually, resulting in significant variations across courts and over time, which provides an ideal setting to examine the impact of judicial transparency on litigation outcomes.

It is challenging to interpret the association between litigant ethnicity and litigation outcomes as a causal relationship. To address this concern, we capitalize on the open justice reform and exploit the variations in policy intensity across courts and over time. By employing a generalized difference-in-differences (DID) empirical design, we test the effect of this reform on ethnicity differences in litigation outcomes and interpret our findings under the assumption that the new surveillance system enhances judicial fairness.

Our work contributes to three key areas of economic literature. Firstly, it aligns with a growing body of research that examines legal biases based on attitudes and stereotypes towards social categories such as race and ethnicity (Abrams, Bertrand, and Mullainathan 2012; Alesina and La Ferrara 2014; Arnold, Dobbie, and Yang 2018; Bielen, Marneffe, and Mocan 2021; Kastellec 2013; Hou and Truex 2019). However, the existing literature provides limited insights into the racial disparities among litigants in China.

Secondly, our study contributes to the emerging field investigating the impact of IT on public affairs. While Pierce, Snow, and McAfee (2015) demonstrate that technology-based employee monitoring systems increase perceived oversight and reduce misconduct, and studies such as Mastrobuoni (2020) and Zamoff, Greenwood, and Burtch (2021) focus on the impact of IT on law enforcement, our work explores the influence of IT on the judicial system and judges. Moreover, while Adams, Adams-Prassl, and Adams-Prassl (2022) address the privacy concerns associated with publishing judicial decisions online, our research primarily focuses on the benefits of enhanced judicial visibility.

Lastly, by identifying racial effects in litigation outcomes in China, our findings contribute to the literature on racial inequality within the country and expand our understanding of the extent of racial bias.

# 2. Background

# 2.1 Courts and Judges in China

The hierarchy of the court system in China has four layers: the local court, the intermediate court, the high court and the Supreme Court. By January 2021, there were 3,087 local courts, 416 intermediate courts, 33 higher courts and 1 Supreme Court in China. Typically, there is one local court in each county, one intermediate court in each prefecture, and one high court in each province. The superior courts are obligated to supervise and monitor subordinate courts in their jurisdiction.

Generally, within each court, there are a number of subcourts equipped with judges specializing in certain issue areas, such as subcourts of criminal cases, civil cases, business cases and juvenile cases. Civil cases, the focus of our paper, are divided into 9 major issue areas, i.e., (1) personal rights, (2) marriage, family and inheritance, (3) property, (4) contracts, (5) intellectual property, (6) industrial disputes, (7) finance, security and insurance, (8) tort liability and (9) special procedures. Subsets of areas are grouped and handled by subcourts.

In China, judges are predominantly powerful in adjudication and are subject to very limited supervision during trials. Typically, there are two types of procedures: summary procedures and general procedures. The former involve a single judge and are applied to simple cases with "clear facts and few disputes". The latter involve 3, 5 or 7 judges and are applied to "complex cases" (e.g., cases with a larger number of litigants). The attitudes and preferences of judges matter greatly for decisions in the court and, thus, litigation outcomes, particularly for cases with one judge in charge (i.e., accounting for more than 70 percent of all civil cases from 2014 to 2018).

# 2.2 Minority in the courtroom

In the late 1970s and early 1980s, China had legal provisions and criminal policy guidelines for the punishment of crimes committed by ethnic minorities. These were based on Article 80 of the 1979 Criminal Law and the "Two Minors, One Lenient" criminal policy. Article 80 of the 1979 Criminal Law stated, "If the laws cannot be entirely applicable to autonomous regions, the national power organs of the autonomous region or province may, according to the political, economic, and cultural characteristics of the local ethnic groups and the basic principles established by this law, formulate alternative or supplementary provisions and submit them to the Standing Committee of the National People's Congress for approval and implementation." This provision was continued in the 1997 Criminal Law.

According to this provision, in addition to the provisions of the Criminal Law, separate regulations applicable to criminal control of ethnic minority crimes should be included. In 1984, in response to concerns that the "strike hard" criminal policy might not be suitable for controlling ethnic minority crimes, the Central Committee of the Communist Party issued instructions stating that "for criminals among ethnic minorities, we should adhere to the principle of arresting and sentencing fewer people, and generally adopt a lenient approach in handling them." This is the "Two Minors, One Lenient" criminal policy. The "Two Minors, One Lenient" criminal policy is a criminal policy implemented specifically for criminals among ethnic minorities, based on the special political, economic, and cultural conditions in ethnic minority areas.

There were scarce and inconsistent evidence on ethnic bias in the court. Hou and Truex (2022) claimed that minority defendants in Yunnan receive sentences that are about 2.1–7.5 months longer than Han defendants who have committed similar drug crimes in the case study of Yunnan, while Peng and Cheng (2022) suggested focal minorities

indeed enjoy preferential sentencing treatment. Additionally, there is no comprehensive study in ethnic bias in non-autonomous region.

#### 2.3 Judicial Reforms

In view of longstanding issues such as low transparency, bureaucratism and local protectionism, the Supreme Court has been implementing a series of reforms since 2014, with the objective of promoting judicial independence, trial openness and judgment fairness. One of the most prominent changes is the open justice reform, during which 4 major information disclosure platforms were created, specializing in publishing legal documents, the live broadcasting of trials, providing access to information about litigation procedures, and displaying blacklists of defaulters.

The content and documents of court files (with some exceptions) must be published on the website "China Judgements Online," to make past decisions available for review in an easy-to-access manner. Obtaining free access to legal documents online is consistent with one of the core objectives of judicial reform. <sup>12</sup> This website was officially launched in July 2013, and as of December 2021, more than 120 million documents had been posted on this website.

In addition, "China Court Trial Online" was officially launched in September 2016, which allows the public to observe trials as they happen in real time on the internet or to view videotaped proceedings later. By the end of 2021, more than 16 million cases had been broadcast. The platform attracted considerable attention from the public, including citizens, journalists, and practitioners in the legal profession.

# 2.4 Reform Implementation of Trial Broadcasting

The Supreme Court has enhanced its efforts to promote trial broadcasting since 2016. Courts at all levels have been requested to live broadcast trials on the website of "China Court Trial Online", with the long-term goal that every trial (excluding exceptional cases) shall be broadcast. However, due to technical and financial constraints, the timing of connecting to the website has varied greatly across courts. By September 2016, 383 courts were connected (accounting for 10.89 percent of all courts); by January 2017, another 762 courts were connected to the website; and by February 2018, all 3,517 courts were connected. In addition to the variation in timing, large differences exist in the proportion of cases broadcast across courts too.

The Supreme Court established lofty goals for the reform, demonstrating the authorities' determination to modernize the legal system. However, lower-level courts did not necessarily have the same ambition, despite their cooperation being essential for the reform's implementation. The solution is characteristically Chinese: higher level courts quantify the desired progress and include it in the rubric used to assess the performance of subordinate courts.

The reform of live broadcasting of trials is no exception. Although practices vary across localities, it is common for intermediate courts to specify a quota of broad-casted trials for local courts and include it as part of the evaluation system. For local courts, the strategy is to divide and assign the quota to subcourts within courts, and the number or proportion of cases broadcast becomes what is graded in performance evaluations of the subcourts.

Usually, the court headfirst selects the quota of cases to be broadcast based on the requirements of the superior court and then allocates assignments to each subcourt. The head judge of each subcourt then decides which cases to broadcast and submits the plan to the court head. In principle, the head reviews the plan and makes a final decision; in practice, however, approval is typically automatic (He and Wang 2015; Liu and Zhu 2020). Our identification strategy is motivated by the institutional features outlined above: we expect the number and fraction of cases to broadcast at the subcourt level to be exogenous to judges' decisions.

#### 3. Data and variable construction

#### 3.1. Data

To create our sample, we acquired legal documents from China Judgements Online, with the help of a commercial data company. We specifically focused on civil litigations involving individual litigants. Our sample was limited to cases with trial dates ranging from January 2014 to December 2018. The reason for choosing this time period was twofold. Firstly, we wanted to examine the gradual introduction of live broadcasting, which varied significantly across courts and time. Secondly, by ending the data collection in the last quarter of 2018, we aimed to ensure that our dataset was as comprehensive as possible. It's important to note that there might be delays in the publication of legal documents by local courts, resulting in some cases' judgments being published a few months later.

To determine whether a case was broadcasted live, we obtained data from the website of China Court Trial Online, with the assistance of a commercial data company. The crucial aspect was obtaining the unique case codes of the broadcasted cases, such as "2017 -Henan-0293 Civil-2nd No.1321".

Additionally, we gathered region-level information from the China City Statistical Yearbook. This information included annual GDP per capita, population, and internet penetration rates for each prefecture and year. The internet penetration rate was calculated by comparing the cumulative number of households with internet access to the total number of households.

# 3.2 Constructing variables.

We extract case-level information from the judgments, which follow a fixed layout and have a semi-structured format. A standard judgment consists of five sections:

basic details about the litigants, claims made by the litigants, facts acknowledged by the court, principles applied, and the outcomes of the litigation.

From the section containing basic information, we gather a variety of variables for each case. For instance, we obtain the case number, which is useful for merging the data with other datasets. The "instance" variable indicates whether a case is heard for the first time in the original jurisdiction or is being reheard on appeal. The litigant information provides the names of the litigants, enabling us to determine whether the case involves individuals, organizations, or enterprises. We also collect data such as the number of plaintiffs and defendants, the ethnicity of the litigants (if applicable), and whether the plaintiffs and defendants appear in court. The information about lawyers includes the names of the lawyers representing both sides and the count of lawyers representing the plaintiffs and defendants. From the outcome section, we extract information about the amount of legal costs and how they are divided among the litigants. Additionally, we obtain the names of the judge(s) from the signature at the end of the legal document.

An important variable for our analysis is the litigation outcome, specifically the probability of winning for the relevant legal parties. According to Chapter 11 of China's Civil Procedure Law, the court's support for a particular side is inversely proportional to the share of legal costs they bear. For example, if the judge rules entirely in favor of the plaintiff, the defendant bears 100 percent of the legal costs. If the judge only partially supports the plaintiff's claim, such as 80 percent, then the plaintiff bears 20 percent of the legal costs. Accordingly, we define the chances of winning for the plaintiffs as the share of legal costs borne by the defendants. Based on this measure, we define the litigation outcome as a binary variable called "Win," which takes the value 1 when the plaintiffs' chances of winning are greater than 50 percent and 0 otherwise.

Shifting our focus to policy implementation measurements, the information about which cases were broadcasted allows us to calculate the ratio of broadcasted cases to the total number of cases at a specific level of aggregation. We refer to this ratio as "intensity." The default measure of policy intensity is to calculate this ratio at the court-area × year-quarter level. By using relative court rankings instead of the absolute value of intensity, we aim to mitigate the impact of extreme values.

# 4. Empirical Strategy

Here we will firstly analysis the correlation between plaintiff's racial with his chance of winning. The following equation was estimated:

$$y_{ijkt} = \beta_0 + \beta \text{ Minority }_i + \omega_j^{\text{area}} + \omega_k^{\text{court}} + \lambda_t + \varepsilon_{ijkt}$$

In our analysis, we examine the plaintiff's probability of winning, denoted as  $y_{ijt}$ , in case i, issue area j, court k, and year-quarter t. We also consider the racial of the plaintiff, Minority  $_i$  indicated by the dummy variable, which takes the value 1 if the plaintiff is minority in case i and 0 otherwise. To account for area-specific factors and time-specific influences that may affect the plaintiff's chances of winning, we incorporate fixed effects for area  $(\omega_j^{\text{area}})$  and court  $(\omega_k^{\text{court}})$ , and year-quarter  $(\lambda_t)$ . To ensure robustness of our estimates, we cluster the standard errors at the court level. The coefficient  $\beta$  is of particular interest as it represents the ethnicity difference in the probability of winning.

Nevertheless, interpreting the ethnic disparity as a causal relationship is challenging, as there could be unobservable factors that are correlated with ethnicity and impact litigation outcomes. To address this issue, we leverage the differences in policy implementation regarding broadcast trials and use it as a means to infer ethnic bias. We assume that the implementation of open justice reforms leads to improvements in the fairness of litigation outcomes.

$$y_{ijkt} = \beta_0 + \beta$$
 Minority  $_i + \gamma$ Intensity  $_{jkt} + \theta$  Minority  $_i *$  intensity  $_{jkt} + \omega_{j \times k}$   $+ \lambda_t + \varepsilon_{ijkt}$ 

In our analysis, we introduce the variable intensity  $_{jkt}$ , representing the ratio of

live-broadcast cases to the total cases in issue area j, court k, and year-quarter t. Additionally, we include the court-area fixed effect  $\omega_{j\times k}$  to account for fixed differences across court-areas. The coefficient of interest, denoted as  $\theta$  for the interaction term, captures the effect of live broadcasting on the ethnic disparity in chances of winning. This effect is assessed while considering fixed differences across court-areas and fixed differences across year-quarters.

We have several reasons for preferring this generalized Difference-in-Differences (DID) model. Firstly, the DID specification accounts for potential fixed effects that may be correlated with ethnicity. This helps to address any confounding factors that could influence the outcomes.

Secondly, the decision of which cases to broadcast is made by the head judge of each court. It is a valid concern that the head judge may select straightforward cases that can be easily and fairly adjudicated. However, this case-level selection issue becomes less relevant in the proposed specification. Since the treatment intensity (the broadcasting of cases) is defined at the court-area × year-quarter level rather than at the individual case level, reshuffling cases between being broadcast or not would not affect the estimated DID coefficient if the reform has no impact on litigation outcomes. This strengthens the robustness of our analysis.

To examine whether the parallel trends assumption holds, we estimate an event study model with the following equation:

$$\begin{aligned} y_{ijkt} &= \beta_0 + \beta \text{ Minority }_i + \sum_{\tau = -8}^8 \gamma_\tau \text{ Reform }_{p,t}^\tau + \sum_{\tau = -8}^8 \theta_\tau \text{ Minority }_i * \text{Reform}_{p,t}^\tau + X'\zeta \\ &+ \omega_j^{\text{area}} + \omega_k^{\text{court}} + \lambda_t + \varepsilon_{ijkt,} \end{aligned}$$

Reform  $_{p,t}^{\tau}$  for  $\tau$  = -8,...,8 is a sequence of dummy variables, indicating that in prefecture p (where court k is located), quarter t is  $\tau$  quarters away from the introduction of the reform. To study the impact of the reform on the ethnic differential, we include the interaction terms between Minority, and Reform  $^{\tau}$ .

Appendix 1: An example of case information extracted from a legal document.

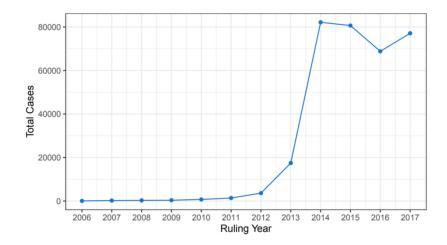


Appendix 2: Data parsing procedure (to be finished)

We created a parsing algorithm based on regular expressions to analyze court documents, identify patterns, extract important information, and automatically assign labels to our variables. In cases where the text did not follow the expected structure, we utilized named entity recognition (NER), a technique that analyzes text and identifies relevant variables such as the defendant's name, birthdate, and gender.

We trained the algorithm extensively until the majority of binary variables achieved an accuracy rate of 95% based on F1 scores from the validation set. Subsequently, we applied the algorithm to the remaining cases and the dataset covering the entire country.

Appendix 3: Missing in the data



The potential reasons for missing data in our dataset can be attributed to various factors. According to the SPC (Supreme People's Court) rules cited by Liebman et al. (2020), there are exemptions in place for cases involving state secrets, personal privacy, juvenile criminal cases, disputes resolved through mediation, and documents considered "inappropriate" for public disclosure. However, it is worth noting that drug cases typically do not fall under these exempted categories. Another possibility is that more severe cases might be withheld or censored due to national security concerns.

Furthermore, interviews conducted by Hou and Truex (2022) with several judges did not provide any indication that the missingness issue is correlated with ethnicity. There is no evidence to suggest that cases with specific outcomes are being selectively censored for certain ethnic groups while others are not.

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