

Analyzing the Effects of Judge Shopping on Criminal Sentencing

Can Wang ^{*}, Rhys Hester [†], Lawrence M. Wein [‡]

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^{*}Department of Electrical Engineering, Stanford University, Stanford, CA 94305, canw@stanford.edu

[†]Department of Sociology, Anthropology and Criminal Justice, Clemson University, Clemson, SC 29634, rhysh@clemson.edu

[‡]Graduate School of Business, Stanford University, Stanford, CA 94305, lwein@stanford.edu, corresponding author

Abstract

Objectives: To understand how the impact of judge shopping on the defendant's cost (including the sentence length, the waiting cost while judge shopping and the cost of going to trial) is mediated by four operational characteristics: the amount of judge rotation, the amount of allowable judge shopping, the visibility of the judges' schedules as observed by the defendants, and the capacity utilization of the judicial system.

Methods: We formulate a three-stage game-theoretic model that incorporates judge shopping by the defendant, the proposed plea deal to the defendant, and the defendant's acceptance or rejection (in which case the case goes to trial) of the plea deal. We derive several structural results from the model, and - using model parameters that are loosely based on South Carolina in 2001 - compute numerical results.

Results: The defendant's cost is decreasing and convex in the amount of judge rotation, the amount of allowable judge shopping, the visibility of the judges' schedules, and the amount of slack capacity.

Conclusions: Conclusions are limited due to an inability to identify the model using South Carolina data. Nonetheless, results suggest that a small amount of allowable judge shopping can reduce a defendant's cost as long as there is some slack capacity in the system.

1 Introduction

This study is motivated by the empirical findings in [1], which looks at criminal sentencing outcomes in South Carolina during 2001. A distinctive aspect of South Carolina’s judicial system, which consists of 50 judges presiding over 46 counties grouped into 16 judicial circuits, is judge rotation: although judges spent much of their time in their home circuit, they traveled to an average of 12 counties (typically holding court for a week in each county) and counties encountered an average of 13 different judges throughout the year. As is the case in other U.S. jurisdictions, more than 98% of sentenced cases ended in a plea bargain and less than 2% went to trial. Results in [1] revealed that judicial rotation had two behavioral effects: it led to judge shopping, where defendants would strategically wait for a lenient judge before agreeing to a plea bargain, and to the cross-pollination of ideas and norms by increasing the interactions among judges and prosecutors.

Consequently, judge rotation led to a decrease in both the mean and variance of the sentence length in South Carolina [1]. Indeed, even though South Carolina was a non-guidelines state, the inter-county variability in sentence lengths was smaller than in most guideline states.

Here, we construct a three-stage game-theoretic model that attempts to capture the effects of judge shopping but does not explicitly incorporate cross-pollination among judges. Defendants shop for a judge in the first stage, the prosecutor proposes a plea deal to the defendant in the second stage, where both sides are aware of the harshness level of the chosen judge, and the defendant either accepts the plea deal or goes to trial in the third stage.

There were not sufficient data to perform an econometric analysis of our game-theoretic model. Specifically, while we know which judge was chosen by each defendant, we do not know which judges were previously rejected by the defendant during the shopping process. Instead, we study – both analytically and computationally – the total cost to the defendant,

which includes the expected sentence length plus waiting costs incurred while shopping and costs of going to trial, as a function of four operational characteristics: the amount of judge rotation, the amount of allowable judge shopping (i.e., how many times a defendant is allowed to reject a judge), the visibility (as observed by the defendants, measured in weeks into the future) of the judges' schedules, and the capacity utilization of the judicial system (i.e., how much does total judge capacity exceed total case workload).

Literature Review Criminology research on sentencing is immense and we refer readers to the “courts as communities” theoretical perspective [2], which includes the effects of individual actors (e.g., prosecutor, judge, defense attorney), the institutional and organizational context of the courtroom (e.g., the type of judicial calendaring system), and outside environmental characteristics (e.g., community expectations, media coverage of crime, jail and prison capacity, presence of advisory sentencing guidelines).

The bulk of our modeling involves the dynamic judge shopping process, which appears to be new, although dynamic choice models are used in many other settings, such as transportation [3] and marketing [4]. The second and third stages of the model are influenced by several recent models [5, 6], which are part of a much larger literature [7]. Among the four operational characteristics we study, only capacity constraints have been modeled in this context [5, 8].

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