

## FW: mathematical model of judicial rotation

Ata, Barış <Baris.Ata@chicagobooth.edu>
To: "Barjesteh, Nasser" <barjesteh@chicagobooth.edu>

Thu, Jun 11, 2020 at 11:15 AM

From: Lawrence Wein <a href="wein@stanford.edu">wein@stanford.edu</a>
Date: Thursday, November 7, 2019 at 11:37 AM
To: "Ata, Barış" <a href="mailto:Baris.Ata@chicagobooth.edu">Baris.Ata@chicagobooth.edu</a>
Subject: Fwd: mathematical model of judicial rotation

5/8/18 email.

Lawrence M. Wein

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-------Forwarded message -----From: Rhys Hester <rzh82@psu.edu>
Date: Tue, May 8, 2018 at 10:48 AM
Subject: Re: mathematical model of judicial rotation
To: Lawrence Wein <lwein@stanford.edu>
Cc: Can Wang <canw@stanford.edu>

Dear Larry and Can,

Sorry again for my dereliction on this project. Here are responses to the items you've been waiting on from me.

a. Find out which circuit (or at-large) each judge belongs to.

I'm attaching an Excel file that has the JudgeID, the number of offenders sentenced (just as a validity check on the JudgeID when you merge in), and the judge's home circuit. The judges with no circuit number indicated are were at-large.

b. How to compute the numbers on the vertical axis in Figure 2.

It looks like the problem here was that the replication file you downloaded from Todd Hartman's page had the total sentence imposed as a variable and not the

expected minimum sentence accounting for parole eligibility that I used in my Figures in the Criminology article. I'm attaching a Stata file that should have all the same variables from the earlier replication file, but in addition it has both the initial sentence variable you had (realsent) and the expected minimum sentence I used for Figure 2 (expmin).

c. Find the handwritten schedules with scribbled changes.

Scans of these files are attached. There are two separate scans, one for 2000 and one for 2001. The data covers fiscal year 2000-2001, so it cuts through both of these calendar schedules. I don't think there are any confidentiality concerns at play here with my previous interviews because I don't think there's any way to identify from this information which of the judges I interviewed—and, the universe of the ~50 judges from 2000-2001 is public record, as are these rotation schedules. Accordingly, I see no issues in sharing these with you. (Sorry if my stating this seems odd, I just thought it prudent out of an abundance of caution to state in writing that I'd considered the potential confidentiality issue and don't consider these files I'm sharing to compromise the judges I interviewed in any way.)

d. Find a contact in SC to find out how far in advance defendants were informed about schedule changes.

I have reached out to try to get some information on this and will update when I hear back.

e. Get the sheets that tell us the mix of criminal vs civil court cases for each judge.

See item C above—the same scans provide this info. GS stands for General Sessions and is the criminal court term. CP is Common Pleas, the civil court term. PCR is post conviction relief which is a special type of collateral attack. I would probably recommend not treating these as criminal terms if what we're trying to get at is the economics of choosing to plead guilty.

f. Confirm that "date" = date of sentence in the data file.

Yes, confirmed.

Thanks again for your patience. I'll try to be much more responsive as additional questions come up on this.

Best,

Rhys

On Apr 25, 2018, at 5:04 PM, Lawrence Wein <a href="wein@stanford.edu">wrote:</a>

OK, thanks, Rhys. Good luck with the move.

Best, Larry

On Wed, Apr 25, 2018 at 2:02 PM, Rhys Hester <rzh82@psu.edu> wrote:

Dear Larry and Can,

I'm very sorry for dropping the ball on this. I also apologize for not responding to your email of 4/4—it came in while I was overseas and I neglected to get back on top of it when I returned.

I'd started pulling together the info we discussed and which you documented in your email of 2/6. I had trouble locating some of the paper files and ig in s to

then got derailed with other projects. (Among some of the other reasons why I've been distracted from this work: I was on the job market and traveling for some job talks in both the fall and earlier parts of this year—as a result of that I'll be transitioning to Clemson University and movi the next few weeks which is causing me to thoroughly go through all of my files so I'm hopeful I'll find the schedules.) I have a few urgent thin attend to but I will make it a priority to get back to you two on these items in the next two weeks.	
Aga	nin, very sorry for being such an unresponsive collaborator. I appreciate your patience.
Bes	ot,
Rhy	vs
	On Apr 4, 2018, at 7:41 PM, Lawrence Wein <a href="mailto:stanford.edu">wrote:</a>
	Hi Rhys,
	Just a gentle reminder that we are awaiting your data from our Feb. 6 request.
	Thanks! Larry
	On Fri, Feb 9, 2018 at 11:55 AM, Lawrence Wein <a href="wein@stanford.edu">wein@stanford.edu</a> wrote:    Rhys,
	1. Can calculated that 8.4% (86 out of 3414) of working (case-sentencing) judge days involved a judge switching counties. That does not seem unreasonable, does it?
	2. Judge #17 (the outlier) worked in Spartanburg for 7 weeks, and was extremely productive (cases sentenced per week) in 3 of those weeks (see attached figure). This judge in other counties, and also other judges in Spartanburg, were not nearly as productive. No need to respond just thought we would share.
	Best,
	Larry
	On Tue, Feb 6, 2018 at 12:42 PM, Lawrence Wein < wein@stanford.edu> wrote:
	Rhys,
	Thanks for talking with us today - this was very helpful. Per our conversation, here are our requests of you. Thanks!
	a. Find out which circuit (or at-large) each judge belongs to.
	h. How to compute the numbers on the vertical axis in Figure 2

c. Find the handwritten schedules with scribbled changes.
d. Find a contact in SC to find out how far in advance defendants were informed about schedule changes.
e. Get the sheets that tell us the mix of criminal vs civil court cases for each judge.
f. Confirm that "date" = date of sentence in the data file.
Larry
On Fri, Feb 2, 2018 at 9:35 AM, Rhys Hester <rzh82@psu.edu> wrote:</rzh82@psu.edu>
No problem!
On Feb 2, 2018, at 11:42 AM, Lawrence Wein <a href="mailto:wein@stanford.edu">wein@stanford.edu</a> wrote:
Hi Rhys,
I am just back from nearly 3 weeks on the road, and realized I have to sit in on an MBA class during our scheduled
meeting time. I hate to re-schedule again, but does Tuesday, Feb 6 at 1 pm ET work?
Thanks and sorry,
Larry
On Mary Jun 00, 2010 at 40,000 DM. Dhur Hantay at 1000 Casy and a suresting
On Mon, Jan 22, 2018 at 12:33 PM, Rhys Hester <rzh82@psu.edu> wrote:</rzh82@psu.edu>
No problem. Talk to you then.
Dhus
Rhys
On Jan 20, 2010, at 2:42 PM Laurence Wein, dusin Octonford adult unrate.
On Jan 22, 2018, at 2:43 PM, Lawrence Wein <a href="wein@stanford.edu">wein@stanford.edu</a> wrote:
Dhus
Rhys,
Our department's annual faculty recruiting meeting just got scheduled during our planned meeting time
on Feb 7. Can we move our meeting to Tuesday, Feb 6 at noon ET? Thanks for your flexibility.
Larry
On Mon, Jan 15, 2018 at 10:00 PM, Rhys Hester <rzh82@psu.edu> wrote:</rzh82@psu.edu>
Great, look forward to speaking with you both on 2/7.
On Jan 15, 2018, at 3:03 PM, Lawrence Wein <a href="wein@stanford.edu">wein@stanford.edu</a> wrote:
Rhys,

Thanks for your quick response. Let's plan on Wed, Feb 7, at 2:45 pm ET (11:45 PT). I'll be at 650-724-1676 Best, Larry On Mon, Jan 15, 2018 at 4:00 PM, Rhys Hester <rzh82@psu.edu> wrote: Hi Larry and Can, Here's a link to the data (see replication files under Todd's first project: http://tkhartman.staff.shef.ac.uk/projects.html). The data includes judge and county for each offender sentencing event. I do have those amended schedules, so I'll dig them out, scan them and email them soon. I'll also get you a year of NC data. For the week of 2/5, I'll be out of the office Thurs and Fri but could do most any time the first part of the week except for 1:30 EST Monday. I'm also open most of the next week, again with the exception of 1:30 Monday. I look forward to picking this back up. Best, Rhys Rhys Hester, JD, PhD 814.863.2543 The Pennsylvania Commission on Sentencing is an agency of the General Assembly affiliated with The Pennsylvania State University. On Jan 12, 2018, at 2:02 PM, Lawrence Wein <lwein@stanford.edu> wrote: Hi Rhys, Happy new year. Please recall our long email exchange below. My student Can Wang (copied on this email) has "cleared the decks" (our recently completed paper on sexual assault kits is attached, just in case this interests you, although I have a cnn.com op-ed coming out that would be much quicker to read) and ready to devote all of her energies to this project! Your answers from 7/17/17 are very helpful. We have a few followup questions and I think a phone call would be a valuable next step. I will be in Europe giving talks over the next 3 weeks. Can we set something up during the week of February 5? I have meetings (all times are ET) on Tuesday either 11:30-1 and 2-3 and on Wednesday 1-2:30. Otherwise, any time from 11:30 onwards is fine

(although perhaps propose a few times in case Can has to attend a class).

To maximize the value of our phone meeting, it would be great if you can send us the raw SC data (and the NC and perhaps PA data also) -- including the detailed rotation of each judge and printouts of the schedule with cross-outs, etc. -- beforehand, which I think will help us sharpen our modeling and questions (as in the attached paper, our modeling needs to be driven by the available data).

Best, Larry

On Wed, Jul 19, 2017 at 9:43 AM, Lawrence Wein <a href="wein@stanford.edu">wrote</a>:

Hi Rhys,

Thanks for all of your comments, which should help us with the model formulation. I think the best approach moving forward is to get my Ph.D. student immersed in this (read your paper, and the related literature on plea bargaining), and then come up with a further set of questions as we try to refine the model. At that point, a phone/skype probably makes sense (after writing the questions out for you). But, realistically, this could take a few months, since she is trying to wrap up an earlier project. If, in the meantime, you feel comfortable sharing the SC (and/or NC and PA) data, that might be helpful (I don't know if there are hoops to jump through to get the data).

Also, as a follow up on Q9, how did the outlier judge handle >2x as many cases as any other judge, and perhaps 4x as many cases as the average judge? Did he/she use overtime, or did this person just have an incredibly efficient/streamlined system/manner? Did you see any outliers like this in NC or PA?

Best,

Larry

On Mon, Jul 17, 2017 at 10:14 AM, Rhys Hester <rzh82@psu.edu> wrote:

Hi Larry,

I've now read your proposal more carefully and have the following comments. There are many aspects to this sort of formal modeling that are beyond my expertise but I'm very happy you're interested and would be happy to work with you on something. Let me know if you'd like to set up a call or if we can proceed with emails that's fine too. I'm happy to share this SC data, and, as I mentioned in a previous email, we might be able to answer some of these questions with North Carolina data.

First, as a point of clarification, on p.1 (and at some places in presenting the model based on this info) you calculated that judges were in their home counties about 75% of the time. In the paper, what I meant to show was that the average judge held court in 12 of the 50 counties in a given year. A term of court is indeed one week. But the judge could rotate much more than 25% of the year since they might go to some of those (on average) 12 counties more than just once. I can look at this from the data but my impression is that most judges rotate out of their home county for much more than 25% of the year. (Also, maybe a minor point, but these same judges preside over civil court as well so they'll have a mix of criminal

court weeks, civil court weeks, and "chambers weeks"—the latter of which is used to write orders etc but not hear any cases. So, each judge presides over a lot less than 52 weeks of criminal court per year.)

I may have home county already coded for each judge; if not, I should be able to do it fairly easily (in ref to comment on bottom of p.2). (Also related to comment on p.4.)

On the timeline of decisions pp.1-6. It may not matter but 2 could come before 1. 4 could be tricky. In the formal sense the prosecutor must offer and the defense must accept as with a contract. But less formally, the defendant could signal an interest in pleading or could suggest the plea terms they're willing to accept, and then the prosecutors proffers the formal agreement. There could also be multiple rounds of 4 & 5—rejecting a plea wouldn't necessarily lead inevitably to a trail (maybe all this is obvious and you just list the numbers this way to present the timeline parsimoniously).

I found the elements about revealing the rotation schedule quite interesting. The way things happened in SC for the years in question were fairly complicated. The Chief Justice of the SC Supreme Court would publish a schedule that covered the fiscal year. However, as it turns out, the schedule was amended numerous times by the office of court administration. This part was never published on the website—I received from the office of court admin a printout of the announced schedule riddled with cross-outs and substitutions written in hand. Some of the these changes were probably announced locally (e.g., email to attorneys with cases on the docket for the upcoming term of court) but I have no evidence either way. I do still have those printouts with the changes somewhere so it would be possible to measure actual versus scheduled rotation.

On the last paragraph of p.4 I'm not sure I agree that the sentence imposed if the defendant is found guilty at trial would not vary by judge. I think the sentencing literature suggests that while there are pronounced trial penalties, there is still reason to expect judge-level differences in sentencing following trail dispositions. I don't know of a paper that addresses this point specifically, but imagine it could be tested. If you're fixing this for some other reasons not obvious to me related to constructing the model, no problem, just wanted to raise the issue.

On p.6, heading Step 3, I do think there's good reason to think defendants can't delay things indefinitely. For one, the prosecutor can docket the case for trial—even if the average time from arrest to trial is a year or two, there is an end time the other parties can bring to realization. Also, as I think you allude to elsewhere, there's a natural tradeoff especially for defendants detained prior to trial. The majority of defendants get probation rather than incarceration (depending on the severity of the crime of course) so for many being held pretrial it makes more sense to get out of jail by pleading guilty rather than staying in to get a more favorable probation term.

Also related to the last comment and to the comments about the timeline, I wonder whether there's a slightly different process in place of a defendant cherry picking the optimal judge from the list. Instead of many selections from a menu what if the decision is essentially a dichotomous one—there's an offer (or defense counsel thinks there could be) and the judge is judge x. So the decision is: do you want to plead now in front of Judge X? If Judge X isn't a plea judge (very lenient) then they might take a look to see what the rotation schedule

looks like for the upcoming weeks or months. If a very favorable judge is coming, maybe they come up with some reason to postpone or maybe they just refuse to plea. But I also found from my interviews that between the extremes of the hanging judges and the plea judges, there was this group of in-between judges who leaned more punitively in their views but essentially reflected the plea judge going rates because they wanted to keep cases moving along more efficiently. I'm not sure that this is related to how to model it formally at all—just making the observation that defendants don't necessarily have to wait for a plea judge; the most important thing is to avoid a hanging judge. For some of the in-betweens, just the fact that a defendant could wait for a plea judge is enough.

P.7 Q1 - Just to clarify, in SC rotation affects calendaring.

Q5 - In the largest respect, an overloaded docket is the county's concern. So if a traveling judge doesn't hear all the cases in one week, it's not his problem—he's moving on the next week. However, if the county is his or her home county, then there might be more of a feeling of ownership over the status of the docket—in fact, I'm sure that's true of some judges at least.

Q6 - this could happen by prosecutors "overcharging" initially by including a man min offense and then dropping in the bargaining process. My SC data can't get to this issue, unfortunately.

 ${\sf Q8}$  - I do have the data with county IDs. For some of the small counties the Ns are very small though.

Q10 - as alluded to earlier, I think pretrial detention might have an important impact. I don't have any indicators in my data on whether the defendant was held pretrial or not. I don't think pretrial status is in the NC data either.

Happy to continue discussing however seems to make the most sense. Thanks again for reaching out. Also, my umn.edu address continues to be active so no problem emailing me on it, but my primary email is now rzh82@psu.edu.

Best,

Rhys

Rhys Hester, JD, PhD

Deputy Director I PA Commission on Sentencing

Senior Lecturer I Penn State, Sociology & Criminology

814.863.2543

The Pennsylvania Commission on Sentencing is an agency of the General Assembly affiliated with The Pennsylvania State University.

Rhys,

That sounds great!! Have a nice remainder of

your vacation. Best regards, Larry On Wed, Jul 5, 2017 at 11:56 AM, Rhys Hester <rahester@umn.edu> wrote: Larry, Sorry for the delay in response-this came my way as I was heading out for vacation. I'm fascinated by this proposal and very interested in working with you on it. I'd be happy to explore this with the SC data I have. North Carolina also uses a variation of judicial rotation where judges rotate within smaller divisions. And in Pennsylvania, where I currently live, the state assigns some judges with senior status to rotating dockets. So there might be some other sources to explore as well-I have several years of good data from both NC and PA. I return to State College this weekend. I'll give your report a more careful read next week and maybe we can follow up in the next week or two to talk about some next steps. Thanks so much for reaching outinterested to see where this leads. Best Regards, Rhys Hester On Jun 29, 2017, at 12:40 PM. Lawrence Wein <lwein@stanford.edu> wrote: Hi Rhys, I am an applied mathematician who has been working in criminology for the last couple of years (jail management, and crime solving via ballistic imaging and sexual assault kits). Although I mostly work on public policy and public health issues, my original training (and my MBA teaching) concerns

operations management issues, such as managing

queues.

I was fascinated by your recent criminology paper on judicial rotation, and intrigued that the "devil in the details" in your paper pertains to workload constraints and gaming behavior (i.e., operations management issues). I am wondering whether it is worthwhile developing a mathematical model of this process and fitting the model to your data (and probably additional data from elsewhere for other aspects of the model). The attached short report takes a quick stab at such a model, and then poses some questions/comments. The goal would be to develop further insights (e.g., just a little bit of judge-shopping flexibility for defendants (e.g., less than the amount of flexibility offered in SC) would considerably improve the outcomes for defendants (e.g., low the mean and variability of their sentence length).

If you have any interest in pursuing this with me, please let me know. A PhD student and I can take the lead on modeling and analysis, and I would mostly be looking for input on the data issues and on selecting the appropriate model and research questions.

Also, I am in no need of any funding.

Thank you for your consideration.

Larry Wein

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<court-game-1.pdf>

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## 4 attachments







