Barjesteh, Nasser <barjesteh@chicagobooth.edu>

FW: judge shopping

Ata, Barış <Baris.Ata@chicagobooth.edu> Thu, Jun 11, 2020 at 11:14 AM
To: "Barjesteh, Nasser" <barjesteh@chicagobooth.edu>

Here is the first email I received … I will send 3 more I think.

From: Lawrence Wein <lwein@stanford.edu>
Date: Friday, October 25, 2019 at 6:43 PM
To: "Ata, Barış" <Baris.Ata@chicagobooth.edu>, Lawrence Wein <lwein@stanford.edu>
Subject: judge shopping

Hi Baris,

I suggest you look at this material in the following order. Sorry that it is all over the place.

1. Hester's Criminology paper. Note, in particular, Figures 1 and 2.

2. The raw data (data.csv) and a description of the data by co-author (Can Wang) call data_description.pdf.

3. Wang's thesis chapter (judgeshopping.pdf)

4. Pages 11-12 (2425_001.pdf) along with this 6/18/19 email:

Can,

See pages 11-12 for a first stab at incorporating capacity constraints. No need to look at this until after your parents leave. Indeed, I doubt we can do anything analytical here, and so I think it makes sense to do things in the following order:

1. V(h,n) as v=r go to infinity.

2. V(h,n) for v=r=1 vs. v=r=2.

3. V(h,n) vs. % of time judge is at home. Note that if a judge spends no time at home, I think it is exactly like having J judges in the same county (every defendant is equally likely to get any of the judges).

4. Incorporate capacity constraints (i.e., edit/fix my model).

5. Estimate parameters.

6. Run all simulation results.

Larry

5. Can Wang's 7/25/19 report (judgeshoppingreport.pdf) and the following 9/17/19 email:

Hi Can,

I looked again at your thesis and the July 25 report.

1. First, it seems to me that the notation in Section 3.4.2 is unnecessarily complex. I don't think we want to think of epsilon as being in the system state. Rather, the state will be just (h,n) and the value function V(x) is the old E_{epsilon}[v(x)]. So the value function is the mean remaining cost. I think this is consistent with, eg, the DP formulation in the Moon paper.

2. I guess a first step is to look at the v=r=infinity case. We want the value function if we observe h_0,h_1,h_2,.... It is optimal to choose arg min_{i=1,2,...} id+u_d(h_i). If we simplify to u(h)=h theta tau and theta tau = 1, then the expected (over harshness levels h) value function is E_h[min_{i=1,2,...} id + min(1+c_d, h_i)]. This should be numerically computable (eg, by simulation). I want to stress that from this point on, it is OK to be able to write out mathematical expressions and then compute them via either integration or simulation. Then the next step would be to calculate (eg, via simulation) the popularity of judge with harshness h, and the mean sentence he gives.

I am not sure how helpful this is. But, again, if we can write down expressions and then write expectations over the vector h, etc., then we can go ahead and simulate. Then when we get to the parameter estimation part, we may need to combine simulation and a search over several parameters.

OK, I know you are very busy at the moment. I'll check back in a couple weeks or so.

Larry

6. A rough partial first draft (judge-shopping.pdf, dated 6/19/19) of a paper intro.

This is probably more than you wanted!!

Larry

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7 attachments

HESTER-2017-Criminology.pdf
300K

data.csv
5173K

data_description.pdf
104K

JudgeShopping.pdf
473K

2425_001.pdf
64K

JudgeShoppingReport.pdf
133K

judge-shopping.pdf
118K