TEXAS
The University of Texas at Austin

ECO395M **Assignment 3 – RDD Replication** **Lutfi Sun**
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Part 1: Github Repo and Summary

1. Github Repository with Subdirectories and Data

- https://github.com/lutfisun/RDD.git

2. Summarize Hansen AER

What is his research question?

- yo

What data does he use?

- yo

What is his research design, or "identification strategy"?

- yo

What are his conclusions?

- yo

Part 2: Reproducing Hansen's Results

3. In the United States, an officer can arrest a driver if after giving them a blood alcohol content (BAC) test they learn the driver had a BAC of 0.08 or higher. We will only focus on the 0.08 BAC cutoff. We will be ignoring the 0.15 cutoff for all this analysis. Create a dummy equaling 1 if bac1>= 0.08 and 0 otherwise in your do file or R file.

- yo

4. The first thing to do in any RDD is look at the raw data and see if there's any evidence for manipulation ("sorting on the running variable"). If people were capable of manipulating their blood alcohol content (bac1), describe the test we would use to check for this. Now evaluate whether you see this in these data? Either recreate Figure 1 using the bac1 variable as your measure of blood alcohol content or use your own density test from software. Do you find evidence for sorting on the running variable? Explain your results. Compare what you found to what Hansen found.

- yo.

5. The second thing we need to do is check for covariate balance. Recreate Table 2 Panel A but only white male, age and accident (acc) as dependent variables. Use your equation 1) for this. Are the covariates balanced at the cutoff? It's okay if they are not exactly the same as Hansen's.

- yo

6. Recreate Figure 2 panel A-D. You can use the -cmogram- command in Stata to do this. Fit both linear and quadratic with confidence intervals. Discuss what you find and compare it with Hansen's paper.

- yo