

Problem Set 1

Kaleigh Strohl
ECON833: Computational Methods
Fall 2021

While I am new to research, my economic interests include applied micro, development, and labor. I do love a lot of economics, so it's hard to narrow down a research field. If I could research absolutely anything I wanted to, it would probably be related to the arts, or gymnastics, or mental health in athletics. Books I've enjoyed related to these fields are [Duflo and Banerjee \(2011\)](#) and [Moretti \(2012\)](#).

I would be very interested in trying to measure the impact of arts education in primary and secondary schools. In my opinion, the arts and its benefits are very underrated in society and are usually the programs that can be smaller or have more limited budgets. But could these programs actually be more beneficial to society than perceived due to their creative and imaginative nature? Is there a link between the presence of programs/more complex programs and academic performance, or college applications, or performance in STEM-related fields?

The arts industry is very wide and could be a source of many research questions. I also love musical theatre, so any kind of project relating to Broadway or the theatre industry would be super cool for me as well. I haven't looked around at specific opportunities [yet] though.

Currently, I am working on a project related to the Larry Nassar [gymnastics] scandal at Michigan State University. This project was inspired by a paper about the Penn State University football scandal – it had used synthetic controls to estimate if there was a difference in student admission application quality before and after the scandal. The paper measured a handful of outcome variables, but a main topic of interest was if the scandal resulted in admittance of students with lower GPAs/test scores relative to before the scandal (therefore implying that the scandal had hurt the academic reputation of Penn State). Unfortunately, the paper has not been officially published yet, so I cannot cite it at this time. The project I'm working on is going to be a very similar analysis but looking at the academic outcomes of Michigan State University after their own scandal.

FIGURE 1: A FIGURE



An equation:

$$\text{Wages}_t = \alpha + \beta_1 \text{Employment}_t + \epsilon$$

References

Duflo, E. and Banerjee, A. (2011). *Poor economics*, volume 619. PublicAffairs.

Moretti, E. (2012). *The new geography of jobs*. Houghton Mifflin Harcourt.