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Economics of Digitization Application (NBER)

I am currently a 3rd year PhD student in Economics at the University of Minnesota. My main area of focus is Industrial Organization and I am particularly interested in digital markets. Indeed, my research projects are very in line with the discussions held at the Digitization Workshop and I believe that the learning experience and the interactions provided by this meeting would directly benefit the quality of my research.

My current work deals precisely with the consequences of the growing importance of the digital segment of retail. My goal is both to measure the convenience welfare gains to consumers of an increase in speed of delivery of goods purchased online and to asses losses for the affected offline retailers. I use exogenous variation in delivery time across zip codes in 15 major US metropolitan areas due to a discontinuity in Amazon Prime Now's delivery radius to identify a causal relationship between faster delivery and changes in consumption patterns between online and offline retail. Faster delivery increases the share of online shopping trips relative to offline shopping trips in zip codes served by Prime Now compared to nearby zip codes on the same city that aren't served. I identify the product categories driving the previous result and the offline retail sectors that are being displaced by the online sector. I find that the product categories leading the increase in online spending are not the traditional ones that already had large online shares before the new service. Convenience store products such as carbonated beverages, yogurt and toiletries are some of the main drivers of the increase in online spending in detriment of offline. Moreover, stores that typically sell these products, such as drug/convenience stores, face a decrease in demand by consumers served by Prime Now, relative to consumers in the same metro area that are not served. Finally, I also estimate a discrete choice model where consumers choose to make trips to different store types. Once Prime Now comes to town, some consumers have an additional alternative in their choice set, while others don't. I use this framework to measure the taste for this new alternative and compute the welfare gains generated.

I am also working with Prof. Waldfogel on a project about the nature of competition between streaming platforms. We look at the content availability over time of several streaming services across different countries and use a couple of different measures of the quality of bundles as well as prices to identify the determinants of the demand for streaming.

The coursework that I've taken reflects my interest in applied microeconomics and empirical questions. After taking the first year core sequence in Microeconomics, Macroeconomics and Econometrics and passing my general exams, I spent my second year taking courses in various fields, with a focus on Industrial Organization and Computational Methods. In the IO sequence at Minnesota, I've taken courses taught by Profs. Amil Petrin, Thomas Holmes, James Schmidt and Joel Waldfogel. Those courses have helped me build a methodological foundation and a knowledge of the literature necessary to transform my interest in digital markets into research contributions going forward.

I am eager to attend this meeting and look forward to hearing from you.