Alex Watkins

University of Virginia
Department of Economics
PO Box 400182
Charlottesville, VA 22904-4182

Cell: +1 (405) 368-2492
Email: acw9zc@virginia.edu

1 Course of Study

I am a third year in the Economics PhD program at the University of Virginia (UVa). I received an M.A. in Economics and completed the necessary coursework for my PhD in Spring 2018. I am currently working on my dissertation proposal, which I will present at the end of the Spring 2019 semester.

My main field of study is labor economics, and I have a secondary interest in public economics. I have also completed the industrial organization (IO) field sequence.

The two-course labor sequence consisted of two empirical courses; one with Professor Eric Chyn and one with Professor Sarah Turner. Together, both courses covered a wide range of topics, including immigration, intergenerational mobility, inequality, and personnel economics. We examined the economics of education literature particularly thoroughly. Professor Chyn focused on teaching us the common methods economists employ to answer empirical questions, highlighting the importance of clarity and transparency in the assumptions that we make. He also trained us to think clearly and precisely about the viability of our assumptions in any given setting. Professor Turner focused on teaching us how to recognize a paper's shortcomings and how to determine whether the methods used were appropriate for the question being studied.

The two-course public sequence was taught by Professor Leora Friedberg and Professor Jonathan Colmer. Professor Friedberg focused on the theory of taxation and social security. She also presented empirical work on how individuals have responded to different tax and social security policies, such as the earned income tax credit program. Professor Colmer covered social insurance, public goods provision, externalities, and corrective policy, emphasizing the mapping between theory and empirics. A significant portion of each labor and public class was dedicated to learning the research process. In each class, we developed and presented a research proposal.

The IO sequence consisted of a theory course taught by Professor Simon Anderson and an empirical course taught by both Professor Federico Ciliberto and Professor Gaurab Aryal. I completed the IO sequence so as to have a better understanding of structural modeling techniques.

In these three years, I have completed coursework that required the use Python, MATLAB, and Stata. I have become proficient in Stata and have basic knowledge of Python and MATLAB.

2 General Research Interests

My research focus is on the costs and benefits that have come with the expansion of the Internet and smart technology. I am interested in this topic because I believe that the Internet and smart technology are going to continue evolving, and will play a bigger and bigger role in our everyday lives. This expansion has not only introduced a number of new questions to study, such as the how social media and the spread of fake news affected the 2016 U.S. presidential election,[1] but has also created new ways to collect data that can be used to answer old questions. For example, Gholampour and van Wincoop (2018) use opinion data on the

[1] See Allcott and Gentzkow (2017)

Euro-Dollar exchange rate from Twitter to study the short- and long-run disconnect between the exchange rate and macro fundamentals, while Cohen et al. (2016) use individual-level data on Uber customers and exploit Uber's surge pricing algorithm to estimate demand elasticities and total consumer surplus.

Currently, I am interested in studying educational outcomes in the context of events that were impossible before the birth and proliferation of both the Internet and smartphones. The question I am focusing on now is how having constant access to entertainment through smartphones has affected student outcomes. This question is relevant because it has become increasingly common for children to have their own cell phones, with an estimated 66% of all 8-18 year olds having one in 2010, up from 39% in 2005.[2]

To answer my question, I am studying the video game Fortnite Battle Royale (hereafter, Fortnite). I am focusing on Fortnite for three reasons. First, it has quickly became one of the most popular games of all time. Fortnite was released, for free, for the PlayStation 4, Xbox One, and computers in September 2017. By December 2017, an estimated 30 million people had played it. By the following June, that number had increased to 125 million. To put this in context, in July 2016, the four best selling games of all time were Grand Theft Auto V (65 million units), released in 2013; Wii Sports (82 million units), released in 2006; Minecraft (106 million units), released in 2011; and Tetris (495 million units), released in 1984.[3] Second, in April 2018, a version was released that could be played on iPhones and iPads. Therefore, any individual with an iPhone can play it at any time and in any location as long as they have an internet connection. Third, anecdotal evidence supports the claim that children are playing Fortnite at school and even during class.[4]

To determine how Fortnite has affected student outcomes, I will exploit the fact that it was released for Apple devices in April 2018, but, as of November 2018, has not been released for Android devices. Therefore, I will be able to compare student outcomes of two locations where Fortnite was equally popular before April 2018, but whose inhabitants had vastly different smartphone preferences. I will proxy for Fortnite's popularity by using Google Trends data. I will use data from a market research group, such as Nielsen, to determine the market penetration of different smartphones. This project is still in the early stages of development, thus I may need to refine my research design based on data availability.

My advisors on this project are Sarah Turner and Bill Johnson. Additionally, Leora Friedberg, Jonathan Colmer, and Sandip Sukhtankar have been active in its development.

I believe that attending the NBER Digitization Tutorial will be very helpful to me, both in terms of my current research project, and in becoming a better researcher. Thank you for considering me for this opportunity.

[2]https://www.kff.org/disparities-policy/press-release/daily-media-use-among-children-and-teens-up-dramatically-from-five-years-ago/

[3]https://www.forbes.com/sites/insertcoin/2016/07/08/here-are-the-five-best-selling-video-games-of-all-time/4e90d9295926

[4]For example, see https://www.edweek.org/ew/articles/2018/05/03/educators-battle-fortnite-for-students-attention.html.

References

[1] Hunt Allcott and Matthew Gentzkow. "Social media and fake news in the 2016 election". In: *Journal of Economic Perspectives* 31.2 (2017), pp. 211–36.

[2] Peter Cohen et al. *Using big data to estimate consumer surplus: The case of uber*. Tech. rep. National Bureau of Economic Research, 2016.

[3] Vahid Gholampour and Eric van Wincoop. "Exchange Rate Disconnect and Private Information: What Can we Learn from Euro-Dollar Tweets?" In: (2018).