Dear Profs. Adrien Auclert, Bence Bardóczy, Matthew Rognlie and Ludwig Straub,

My name is Emanuel Schertz and currently I am a second year Ph.D student at the Economics Department in Harvard University. Please find attached my application materials for the NBER's Graduate Student Workshop on Heterogeneus-Agent Macroeconomics.

I am attaching the information of Prof. Gabriel Chodorow-Reich in case you need a recommendation from a faculty member. I am also attaching my contact information.

Thank you for taking the time to consider my application, I look forward to hearing back from you.

Best regards,

Emanuel Schertz

Gabriel Chodorow-Reich (recommender)
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EMANUEL SCHERTZ

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EDUCATION

Harvard University, Cambridge, MA 8/2021–Present
PhD in Economics
Relevant courses:

- Econ 2010C (Dynamic programming – Prof. David Laibson; Growth Theory – Prof. Robert Barro) A- (Fall 2021)
- Econ 2010D (Business Cycles using RBC and NK models – Prof. Ludwig Straub; Macro-Labor – Prof. Adrien Billal; Introduction to International and Behavioral Macroeconomics – Prof. Xavier Gabaix) A- (Spring 2022)
- Econ 2416 (Advanced Topics in Empirical Macroeconomics – Prof. Gabriel Chodorow-Reich) A (Fall 2022)
- Econ 2410A (Macro-Finance Rational and Behavioral – Prof. Xavier Gabaix) grade tbd (Spring 2023)
- MIT course 14.462 (Risk Centric Macroeconomics – Prof. Ricardo Caballero; second part – Prof. Ivan Werning) grade tbd (Spring 2023)
- Other courses: Labor and IO sequences (and audited the metrics sequence) as well as first year micro and metrics sequence

Universidad ORT, Montevideo, Uruguay 3/2015–8/2019
BS in Economics

INDEPENDENT RESEARCH (advanced stage)

Uruguayan Administrative Data 2/2020–Present

- Leading work with Profs. Serafin Frache & Leandro Zipitria to combine data sources from the tax agency, social security agencies and national registries to construct the first unified database of Uruguayan administrative data.
- Estimating life expectancy by income to 1) join international comparison; 2) assist government on modifying social security.
  - Also leading related work done with Chilean data.
- Designed method to analyze effect of studying different *subjects* on long-term outcomes, generating (1) more precise estimates of the causal effect of education; (2) evidence identifying the knowledge vs. signaling effect of individual subjects.

Does Paying with Cards Reduce Crime at Stores? Evidence from a Targeted Cash Ban in Uruguay 7/2018–Present
Accepted for publication Journal of Law and Economics – Nestor Gandelman and Ignacio Munyo

- Analyzes the effect of cash on crime using geolocated crime data from Montevideo.
- Diff-in-diff setting exploiting exogenous ban on cash at gas stations during the night that did not affect other stores or areas.
- Presented at the *XXXIV Jornadas Anuales de Economia* –a major economics conference in Uruguay.

EXPERIENCE

Harvard University, *Research Assistant,* Cambridge, MA 6/2022–9/2022
Professor Gabriel Chodorow-Reich

Opportunity Insights at Harvard University, *Predoctoral Research Fellow,* Cambridge, MA 7/2019–7/2021
Professors Raj Chetty, John Friedman and Nathan Hendren

Department of Economics - Universidad ORT, *Research Assistant,* Montevideo, Uruguay 10/2017–11/2017; 7/2018–7/2019
Prof. Nestor Gandelman (7/2018–7/2019) and *Prof. Flavia Roldan* (10/2017–11/2017)

Department of Economics – Universidad ORT, *Teacher Assistant,* Montevideo, Uruguay 3/2019–8/2019
Mathematics I (Prof. Erik Caceres. Fall 2019); Monetary Economics (Prof. Julio de Brun, Fall 2019)

International Mathematical Olympiad (IMO), *Participant and Organizer*, Montevideo, Uruguay 3/2011–8/2019

SKILLS AND INTERESTS

Computer:	*Advanced*: Stata; *Intermediate*: Python, MATLAB; *Basic*: EViews, R
Language:	English (Proficient – TOEFL: 113/120), Spanish (Native), Hebrew (Intermediate)
Interests:	Reading, Running, Music, BBQs, Soccer, Coffee

Research Statement

Emanuel Schertz

My name is Emanuel Schertz and I'm a second year PhD student at the Department of Economics in Harvard University. I'm mainly interested in macroeconomics research, but I'm still trying to decide where to focus. I've taken the first-year macroeconomics sequence as well as different field courses that have helped me start developing the tools to work in macroeconomics, but most importantly, given me the context to start thinking about problems. For example, Prof. Xavier Gabaix's course helped me to start thinking about topics related to networks in macroeconomics, and Prof. Gabriel Chodorow Reich's Empirical Macroeconomics course showed us how to use a whole set of different techniques in order to estimate the different objects. Another example would be Prof. Ricardo Caballero's class that has changed how I think about risk sharing in an economy and the effects it can have – as well as being a different type of way to do research.

Since starting the PhD program I've slowly transitioned away from a main interest in labor economics into macroeconomics which has been a great experience so far, but it also meant that I am a bit behind on my knowledge of the field. Getting to attend different classes has been great to both learn new material, but most importantly to inspire research ideas. And this is exactly why I want to attend this seminar. Heterogenous-Agent models are increasingly important in the discipline and so is being able to use them aptly – especially the ability to code them up.

In addition to that, students at different schools have exposure to different classes and ways of thinking, so it's always great to be able to interact with them – and this is especially good given that we'll all have similar interests, so it would be a good opportunity to start possible collaborations.

All in all, this workshop would be an amazing exposure to the frontier of research in the area, while providing access to a great community of students. I am looking forward to the opportunity to learn from such a group. Thank you so much for considering my application.