February 14, 2023

Dear Panel of Admissions,

I would like to express my interest in being selected to attend the NBER Entrepreneurship Boot Camp 2023. I am a fifth year PhD student at the University of Maryland specializing in Macroeconomics and Labor Economics with research interests in entrepreneurship. You will find in my interest essay the details of my current research project examining the effect of student debt on business formation and growth along with my other research work involving entrepreneurship. I am also attaching my CV and a list of my completed PhD coursework.

The following three documents are included in this PDF packet with page reference numbers in paratheses:

1. CV (p. 1)
2. List of Current and Completed PhD Courses (p.2)
3. Interest Essay (p. 3-4)

In addition to the attached documents, I provide below my own contact information. I am also including below the contact information of the author of my letter of recommendation, Dr. Sabrina Howell, who is a collaborator on a current Census research project examining how receiving a federal disaster assistance loan from the Small Business Administration (SBA) impacts firm survival and growth after a natural disaster. To provide additional information on my dissertation work, I am including the information of the co-chair of my dissertation committee, John Haltiwanger.

Thank you for considering my application to the NBER Entrepreneurship Boot Camp 2023. Please do not hesitate to contact me if I can provide any additional information!

Sincerely,

Lea Rendell

Email: lrendell@umd.edu
Phone: 402-201-4633

Recommender's Contact Information:

Name: Sabrina Howell
Title: Associate Professor of Finance
NYU Stern School of Business & NBER
Email: sabrina.howell@nyu.edu
phone: 212-998-0719

Name: John Haltiwanger
Title: Distinguished University Professor;
Dudley and Louisa Dillard Professor of Economics
University of Maryland
Email: halt@umd.edu
Phone: 301-405-3504

Lea Rendell

University of Maryland
Department of Economics
College Park, MD 20742
Email: lrendell@umd.edu

EDUCATION

Ph.D. Economics, University of Maryland at College Park, expected 2024
Advisors: Katharine Abraham (co-chair), John Haltiwanger (co-chair) and Ethan Kaplan
M.A. Economics, University of Maryland at College Park, 2020
B.A. Economics, Vassar College, New York, 2015
Economics Major with Math Minor, Departmental and General Honors, Phi Beta Kappa

FIELDS OF SPECIALIZATION

Primary: Macroeconomics
Secondary: Labor Economics

ACADEMIC PUBLICATIONS AND WORKING PAPERS

"How Tight is the US Labor Market?" (with Katharine Abraham and John Haltiwanger)
Brookings Papers on Economic Activity, Spring 2020.
"Where are the Missing Workers?" (with Katharine Abraham), in preparation.
"Inflation and Deflationary Bias in Inflation Expectations,"(with Michael J. Lamla and Damjan Pfajfar)

OTHER RESEARCH

"The Impact of Student Debt on Business Formation and Growth", work in progress.
"Why Has It Been So Hard for Firms to Fill Jobs During the Pandemic Recovery?" (with Katharine Abraham and John Haltiwanger) work in progress.
"Restrictions to Abortion Access and Voter Turnout" (with Jorge Perilla Garcia), work in progress.

TEACHING EXPERIENCE

University of Maryland:
Instructor, Economics of Education Policy (undergraduate), Summer 2021, Winter 2022, Summer 2022
Vassar College:
Teaching Assistant, Introduction to Economics (undergraduate), Spring 2015
Teaching Assistant, Intermediate Macroeconomic Theory (undergraduate), Fall 2014

RESEARCH AND RELEVANT WORK EXPERIENCE

Economist, Economic Measurement Research Intern Program,
United States Census Bureau, February 2022 – Current
Research Assistant, Prof. John Haltiwanger,
University of Maryland, Fall 2018 – February 2022
Research Assistant, Prof. John Haltiwanger and Prof. Katharine Abraham,
University of Maryland, Spring 2019 – Spring 2020.
Research Assistant, Macroeconomic and Quantitative Studies Section,
Board of Governors of the Federal Reserve, July 2015-July 2017

COMPUTATIONAL SKILLS

Stata, Matlab, dynare, Eviews, Excel, LaTeX, SAS

LANGUAGES

English (native), French (conversational)

REFERENCES

Prof. John Haltiwanger	University of Maryland	haltiwan@umd.edu	(301) 405-3504
Prof. Katharine Abraham	University of Maryland	kabraham@umd.edu	(301) 405-1004

Rendell Economic Course List

- First Year Sequence:
  - ECON 601: Macroeconomic Analysis I
  - ECON 602: Macroeconomic Analysis II
  - ECON 603: Microeconomic Analysis I
  - ECON 604: Microeconomic Analysis II
  - ECON 623: Econometrics I
  - ECON 624: Econometrics II
- Field Courses:
  - ECON 626: Empirical Microeconomics
  - ECON 630: Computational Methods in Macroeconomics
  - ECON 701: Advanced Macroeconomics I
  - ECON 702: Advanced Macroeconomics II
  - ECON 747: Macroeconomics of Imperfect Capital Markets
  - ECON 754: Topics in Political Economy I
  - ECON 756: Empirical Political Economy
  - ECON 771: Advanced Labor Economics: Theory and Evolution
  - ECON 772: Population Economics (Advanced Labor II)

Rendell Essay on Research Interests

As a fifth year PhD student specializing in macroeconomics and labor economics, I study entrepreneurship; My job market project examines the impacts of student debt on business formation and growth. I am interested in attending the NBER Entrepreneurship Research Boot Camp to have the opportunity to learn from the prominent experts on entrepreneurship and collaborate with other scholars interested in entrepreneurship.

Taking the course macroeconomics of imperfect capital markets in my second year sparked my interest in the barriers to firm entry and how financial constraints could impede high productivity entrepreneurs from entering the market. This fused with my interest in the effects of the rising student debt burden for my third year paper where I expanded Cagetti and De Nardi (2006)'s occupational choice model to examine how student debt levels could interact with a borrowing constraint for capital in an occupational choice model of workers and entrepreneurs. I have continued this project and received Census project approval allowing me to link longitudinal administrative data on business formation with the Census internal version of the National Survey of College Graduates (NSCG), which gives me the measure of student loans.

My project using census data will estimate the causal relationship between the value of student loans and the propensity to start a business. In addition, the administrative data allows me to expand my question to understand the types of businesses formed (employer vs. non-employer) and, using the longitudinal nature of my dataset, to estimate firm survival, transitions from non-employer to employer, business size and revenue. I link the individuals' information on education and student debt from the NSCG to their employment history from the Longitudinal Employer Household Dynamics (LEHD) and can determine whether they formed a business using the Longitudinal Business Database (LBD), Integrated Longitudinal Business Database (ILBD), the Business Register (BR) and W-2 information. As a first step, I documented a strong negative relationship between remaining loan value and entrepreneurship in the National Survey of College Graduates (NSCG). For every $25,000 in student debt, the probability of starting a business decreases by 0.83 percentage points. Given that only 3.5% of the sample are entrepreneurs this is a decline of 23.7%. However, there are unobservable characteristics that affect both student debt and the likelihood of starting a business (e.g. ability and familial wealth). Therefore, I follow the causal estimation strategy of Mezza et al. (2020) in instrumenting for student debt by using average tuition for public four-year institutions interacted with an indicator for attending a public institution. Although there have been a limited number of studies that examine the effects of student loans on entrepreneurship, the longitudinal nature of my data and estimation strategy allows me to extend the analysis period of previous studies and, most importantly, allows me to use administrative data on business formation rather than cross-sectional survey data[1]. Furthermore, the rich administrative data will allow me to answer a new set of questions about the types and success of firms that are created.

[1]Studies such as Krishnan and Wang (2019) and Morazzoni (2022) who use the Higher Education Amendment of 1988 as a shock to student debt levels. This limits their analysis to the period around 1998. However, student debt balances started rapidly increasing after 1998 so expanding the time period of study is of high importance. In addition, both of these studies use the Survey of Consumer Finance which is cross-sectional survey data

In addition to my job market project, I have also been fortunate to collaborate on several projects related to entrepreneurship. In my position at the Census Bureau, I have had the fortune of collaborating closely with Professor Sabrina Howell on a project examining how federal disaster assistance loans from the Small Business Administration (SBA) mediate the recovery of firms from a natural disaster. Linking SBA data to the Longitudinal Business Database (LBD) and Integrated Longitudinal Business Database (ILBD), we examine survival, employment, and financial effects of receiving assistance for firms right above a credit threshold who received the loans compared to firms just below this threshold who did not. Also, as an RA for my advisor, Professor John Haltiwanger, I had the opportunity to work on a project involving business dynamism, from which I learned a great deal about firm dynamics. I've also recently had the opportunity to start a preliminary project examining the job filling rate of firms during the pandemic.

I hope to continue working on projects related to entrepreneurship; in particular, I would like to focus on projects that examine the barrier to entry for entrepreneurs, especially those from marginalized backgrounds, to quantify the lost innovation due to these barriers. Being chosen to attend the NBER Entrepreneurship Research Boot camp would provide an excellent opportunity to spend the week immersing myself in the literature and learning about the research methods at the forefront of the study of entrepreneurship. Expanding my knowledge on the different areas of entrepreneurship research through the lecture series would give me the foundation that I need to continue to generate new ideas and expand my research agenda. The importance of networking with current leaders in the field and with future researchers cannot be overstated. I would hope to form connections with other participants that could lead to future collaboration answering important questions on entrepreneurship. I know that my current research will greatly benefit from this workshop through the lessons I learn and conversations I have with fellow researchers. I am grateful for the consideration and hope that I will have the opportunity to be part of this boot camp this summer.

References

Marco Cagetti and Mariacristina De Nardi. Entrepreneurship, frictions, and wealth. *Journal of political Economy*, 114(5):835–870, 2006.

Karthik Krishnan and Pinshuo Wang. The cost of financing education: can student debt hinder entrepreneurship? *Management Science*, 65(10):4522–4554, 2019.

Alvaro Mezza, Daniel Ringo, Shane Sherlund, and Kamila Sommer. Student loans and homeownership. *Journal of Labor Economics*, 38, 2020. ISSN 0734306X. doi: 10.1086/704609.

Marta Morazzoni. Student debt and entrepreneurship in the us, 2022.