Wenjian Xu
Department of Economics
University of Michigan
371A Lorch Hall,
611 Tappan St.
Ann Arbor, MI 48109

March 27, 2018

NBER
Cambridge,
Massachusetts

To Whom It May Concern:

I am a Ph.D. candidate in economics at the University of Michigan. I am writing to apply for the NBER Entrepreneurship Research Boot Camp. Given my research interests and the work I have done in entrepreneurship, I believe I will benefit significantly from participation, and from my academic studies contribute to conversations.

My previous research studied how unemployment insurance benefits and "family insurance" (for example, spouse's job status), affect unemployed people's decision to start a business. Now, I am working on projects exploring the entrepreneurship during the recent financial crisis, especially, the role of financial intermediaries and collateral value in shaping entrepreneurship. When I found the information about this camp, I immediately felt it would be very useful for me to participate in it, read more relevant papers and discuss my research with other people in this field. The letter of recommendation will be written by Professor Charles Brown.

I can be reached with further questions at wenjianx@umich.edu, or at (734) 730-6836. Thank you for your time and consideration.

Sincerely,

Wenjian Xu

WENJIAN XU

University of Michigan
Department of Economics
Ann Arbor, MI 48104

Tel: (734) 730-6836
wenjianx@umich.edu
Citizenship: China, F1 Visa

EDUCATION

Ph.D. in Economics, University of Michigan — Expected May 2020
M.A. in Economics, University of Michigan — 2016
M.A. in Economics, Peking University (Beijing, China) — 2014
B.A. in Behavior Finance, Dongbei University of Finance and Economic (Dalian, China) 2010

RESEARCH FIELDS

Finance, Entrepreneurship, Labor Economics

WORKING PAPERS

"How the Personal Experiences during Financial Crisis Affect Risk Taking", 2016
"The Impacts of Air Pollution on Social Activities and Health: Evidence from China", 2015

WORKS IN PROGRESS

"Entrepreneurship among the Unemployed: The Effects of Unemployment Benefits and Expectations"
"Rainfall Shocks and Sex Ratios: Evidence from India", with Jagadeesh Sivadasan

PUBLICATIONS IN CHINESE

Xiaoyan Lei, Wenjian Xu and Yaohui Zhao. "Does Marrying Up Make Your Life More Satisfied? Marriage Pattern and Its Long-term Effects." China Economic Quarterly, 14(1) 31-50. October 2014.

WORK EXPERIENCE

Research Assistant. University of Michigan with Professor Jagadeesh Sivadasan, Fall 2016.
Research Assistant. University of Michigan with Professor E. Han Kim, Jagadeesh Sivadasan and Yao Lu, Summer 2016
Research Assistant. University of Michigan with Professor Tyler Shumway, Summer 2015

TEACHING EXPERIENCE

Graduate Student Instructor, Intermediate Introduction to Statistics and Econometrics, 2017

HONORS AND AWARDS

Rackham Summer Research Award, University of Michigan — 2017
Letter of Commendation for Excellent Teaching — Winter 2017
Summer Research Apprenticeship, University of Michigan — 2015, 2016
First Prize for Graduate Scholarship, Peking University — 2012

LANGUAGE AND COMPUTER SKILLS

Language: English (Fluent), Chinese Mandarin (Native)
Software: Matlab, Stata, SAS

List of Ph.D. Courses

1. Mathematical Economics	(Econ 600) Fall 2014
2. Microeconomics Theory I	(Econ 601) Fall 2014
3. Microeconomics Theory II	(Econ 602) Winter 2015
4. Microeconomics Theory III	(Econ 603) Fall 2014
5. Microeconomics Theory IV	(Econ 604) Winter 2015
6. Macroeconomics Theory I	(Econ 605) Fall 2014
7. Macroeconomics Theory II	(Econ 607) Winter 2015
8. Econometric Analysis I	(Econ 671) Fall 2014
9. Econometric Analysis II	(Econ 672) Winter 2015
10. Empirical Asset Pricing	(Econ 651) Fall 2015
11. Introductory Financial Economics	(Fin 855) Fall 2015
12. Corporate Finance	(Fin 871) Fall 2016
13. Labor Economics 1	(Econ 621) Fall 2015
14. Labor Economics 2	(Econ 622) Winter 2016
15. Industry Organization and Public Policy	(Econ 632) Winter 2016
16. Applied Macro-econometrics	(Econ 676) Winter 2016

Essay

When I was 11 years old, my father lost his job from a state-owned company. That was a big shock to my family. Lately, I realized that in that period, the Chinese government was privatizing many state-owned enterprises and closing some due to their bad performance. Since my father had built connections with fertilizer companies in his previous job, my parents decided to open a store and sell fertilizer. Thanks to this small business, my parents could afford to keep my older brother and me in school. My parents' experience of starting a business after losing jobs left a profound impression on me. I became curious about why some unemployed individuals decide to start a business, and others do not, and specifically, what drives and constrains entrepreneurship at the individual, family and policy level. My research agenda is to disentangle these questions. Attending the NBER Entrepreneurship Research Boot Camp will provide me a valuable opportunity to build a deeper understanding about this field. Discussing ideas and methodology with other scholars in this field will shape my thinking about these questions, polish my previous project, and encourage me to keep moving forward.

The origin of my previous paper lies in the observation that entrepreneurship has been studied broadly, but few studies have examined start-up businesses founded by unemployed workers. During the years 2009-2011, the unemployment rate in the U.S. was as high as $9-10\%$, and the human capital of such a large group of people lies idle during recessions. Many unemployed individuals spend a long time searching for new jobs, but the effectiveness of their job search is limited by the rationing of jobs during a recession. In that project, I focused on the factors at two different levels: policy and family levels. To be specific, I explored the effects of unemployment insurance (UI) and spouse's job status.

To understand the details about receiving UI benefits while starting a business, I created a short questionnaire. After contacting the labor department in each state, I finally received replies from 21 states. Through the survey results, I realized that the unemployed could receive UI benefits while starting a business, but business profits (revenue in 2 states) will be deducted from the UI benefits. Based on these answers, I conducted analysis using Current Population Survey monthly data linked to each state's benefit schedule from the

U.S. Department of Labor's publication. I also made use of search requirements from Toohey (2015), and the information of expectations from the Surveys of Consumers.

The results show that unemployment benefits have a significantly negative effect on switching from unemployment to self-employment, especially on unincorporated self-employment, while individuals with a spouse having a job are more likely to start businesses. I also provide a placebo test finding UI benefits have no effect on the group which is not eligible for benefits, which makes the results more convincing.

After finishing this project, I became interested in the important role of entrepreneurship in the recent financial crisis, which has not been fully explored. My current project tries to approach this problem through two different ways. One is to probe how the bank credit contraction affects entrepreneurship. I plan to match the Longitudinal Business Database (LBD) to the bank loan data collected under the Community Reinvestment Act (CRA) at the county level. I will measure the loss and stress of these banks, and investigate, if the main bank in one county was seriously affected, how it has affected small business loans and the number of new businesses. Then, we can see if decreasing number of entrepreneurs has lead to the sluggish recovery in the labor market.

The second approach is to make use of the variation in the differential changes of housing prices during the recent financial crisis. People living in counties that have experienced a large drop in house prices, are more likely to confront collateral shocks, and thus less likely to become entrepreneurs because of liquidity shocks. Decreasing house prices, however, might affect entrepreneurship through three channels: (1) collateral value; (2) entrepreneurial wealth; and (3) demand shock in the product market or investment opportunity. Distinguishing these three different channels could be difficult. I am currently thinking about using the First-Time Homebuyer Credit (FTHC) policy, which was introduced in the U.S. between 2008 and 2010 aimed at supporting weak housing markets (see Berger et al. (2017)), as an instrumental variable (IV). This IV could help to tease out the collateral channel from the demand channel, since this IV is not related to demand shocks. To tell apart the collateral and wealth channels, currently, I am planning to use indirect evidence, like the number of collateral loans in the county level.

When I heard the information about this Camp, I immediately recognized the benefits to my research. Having attended several NBER-CCER Annual Conferences, and weekly seminars in labor economics and finance, I am aware that meeting and talking with professors and Ph.D. students who have similar interests will help me to polish my current project, develop novel ideas for future research, and allow me to contribute to the entrepreneurship conversation. Meanwhile, networking with other scholars will benefit my future career. I look forward to participating in the boot camp.

UNIVERSITY OF MICHIGAN
ECONOMICS

March 30, 2018

Recommendation for **Wenjian Xu** for NBER Entrepreneurship Research Boot Camp

Dear Selection Committee member:

Wenjian Xu is a fourth year student in our PhD program who is applying for this summer's ERBC. I first encountered Wenjian as a student in our graduate labor sequence. His term paper dealt with the incentives (or disincentives) that the unemployment insurance system presents for unemployed workers who are thinking about starting their own business. The project began as an evaluation of special programs adopted by some states to encourage such transitions, but the scale of these programs proved too small to have detectable impacts. Wenjian then broadened his focus to pursue a more general study of the UI-new business connection. This is the first project that he described in his application essay. While the analysis is well executed, the standard errors of the estimated impact are larger than we had hoped, and he is moving on to other topics.

Wenjian has benefited from the geographic proximity and cooperative relationship between the Economics Department (his home department, and mine) and the faculty of our Ross School of Business. He has taken their finance sequence and worked with three of their faculty (on three separate projects). In his newer work, he is taking advantage of his finance side, looking at how various financial shocks (operating through the banking system and/or the housing market) impact decisions related to entrepreneurship. These projects are very promising, but in the early stage of development.

What both the labor-flavored project on unemployment insurance and the finance-driven work in progress have in common is a focus on entrepreneurship. So, in terms of substantive interest and ability to benefit from the breadth of the ERBC program, Wenjian is an excellent fit. I believe the timing is also close to perfect – he is far enough along, but also far enough from completion, for participation in ERBC to have the greatest impact.

Given his training, interests, and level of commitment, I am pleased to recommend Wenjian for the Entrepreneurship Research Boot Camp.

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Sincerely,

Charles Brown

Charles Brown
Professor of Economics
Research Professor, Survey Research Center

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