Cover Letter

To whom it may concern,

I am writing to apply to the NBER entrepreneurship bootcamp. In my research, I conduct field experiments to understand the market and credit constraints to female entrepreneurship in developing countries. I am hoping to better understand the broader literature on the economics of entrepreneurship and entrepreneurial finance, and to meet researchers within these fields. I hope you look favorably upon my application and attach the required information below.

Contact Information:

- Name: Layane Alhorr
- Email: Layane_alhorr@g.harvard.edu | Layane.alhorr@gmail.com
- Phone: +1(857)919-1835

Recommendation writer:

Professor Rema Hanna, Harvard Kennedy School

Layane Alhorr – CV
124 Mt. Auburn Street, Cambridge MA 02138. Suite 100, Room 112
+1 (857) 919-1835 | Layane.Alhorr@gmail.com | Layane_Alhorr@g.harvard.edu

Education

2017-24 (expected)	PhD Candidate in Public Policy, Economics Track - Harvard University, Cambridge USA Fields: Development, Labor, and Behavioral Economics
2014-15	M.A. in International and Development Economics - Yale University, New Haven CT
2019-20	B.A. in Economics and minor in Mathematics - Lebanese American University, Beirut Lebanon

Research Experience:

2020-22	Visiting Economic Researcher at Facebook, Cambridge USA
2019-20	Research Analyst for Dr. Asim Khwaja (Harvard University), Cambridge USA
2019-20	Research Analyst for Dr. Rema Hanna (Harvard University), Cambridge USA
2016-17	Research Analyst for Dr. William Jack (Georgetown University), Nairobi Kenya
2015-17	Research Analyst for Dr. Tavneet Suri (MIT Sloan), Cambridge USA
2015-16	Research Analyst for Dr. Rachel Glennerster (J-PAL), Cambridge USA

Selected Grants

2021	Middle East Initiative at the Harvard Kennedy School ($81,414)
2021	Harvard GSAS Graduate Student Funding ($6,000)
2020	Middle East Initiative at the Harvard Kennedy School ($10,000)
2020	Departmental Funding at the Harvard Kennedy School ($6,200)
2020	Joint CID/Wiener Center Awards for Research in Inequality ($5,000)
2020	Harvard GSAS Graduate Society Summer Predissertation Fellowship ($3,000)
2018	Innovations for Poverty Actions Peace and Recovery Travel Grant ($2,700)

Academic Honors and Awards

2020-21	Distinction in Teaching Award (2x), Office of Undergraduate Education at Harvard University
2014	Fulbright Fellowship to pursue graduate studies at Yale University, US State Department
2014	Riad Nassar Award for best academic and leadership skills on campus, LAU
2011	Full Merit Scholarship to pursue undergraduate studies in Economics, LAU

Teaching Experience and Awards:

Spring 2022	Teaching Fellow, Migrant Remittances and Financial Services (HKS executive education class)
Fall 2021	Teaching Fellow, Leading Smart Policy Design (HKS executive education class)
Spring 2020	Instructor, The Economics of social media (Econ 970, Harvard University)
Spring 2020	Guest Lecturer, Technology and Female Labor Supply (Boston University)
Fall 2020	Teaching Fellow, Survey Research Methods (Gov 1010, Harvard University

Refereeing Services

Journal of Development Economics

Affiliations:

2020-	Affiliate at the Institute for Quantitative Social Science (IQSS, profile)
2018-	Affiliate at the Harvard Kennedy School Evidence for Policy Action (EPoD, profile)

Service and Mentorship

2020-21	Organizer of the development lunch at the Harvard economics department (fall & spring)
2019-21	Chair of Research and Development committee at the Kennedy PhD Student Association
2018-21	Mentor for assigned first-year students at the Kennedy PhD Student Association
2018-22	Core team member at the Harvard Graduate Women in Economics student group
2013-14	Founder of the Economics Club, awarded professionalism & Outreach awards – LAU
2013-14	Trainer at the Outreach & Civic Engagement Unit to 160 high school students - LAU

Skills:

Technical: Stata, R, SQL (intermediate), LaTeX
Languages: Arabic (native), English (fluent), French (very good)

Work in Progress:

"Digital business training programs and female entrepreneurship" (AEA registry 7790). Endline ongoing.
"Cell Phones and Growth in Kenya", with Tavneet Suri and Kamal Bhattacharya.

Selected PhD Courses

- Microeconomic theory I (Kotowski)
- Microeconomic theory II (Avery)
- Market design (Kominers)
- Econometrics I (Cicala)
- Econometrics II (Angrist and Chernozhukov)
- Machine Learning in Econometrics (Mullainathan)
- Labor Economics I (Acemoglu Pathak)
- Labor Market Analysis (Katz)
- Psychology and Economic Theory (Rabin)
- Microeconomics of Development (Breza)
- Behavioral Development Economics (Rao)
- The political economy of the school (Peterson)
- Doctoral Research Seminar (Baum)
- Political Concepts: Field Seminar (Applbaum)

Research & Interest in this Bootcamp

I am an aspiring development economist studying market and credit constraints to entrepreneurship, with a focus on female entrepreneurship in developing countries. Research has shown that women around the world face constraints on their mobility, social networks, and productivity. With higher use of cellphones and the Internet around the world, it is increasingly important to understand the extent to which virtual communication could alleviate some of the constraints imposed on female entrepreneurs' mobility and market access, and the extent to which alleviating such constraints could unlock growth. I elaborate on two ongoing field experiments within this agenda below.

1- *Virtual windows across glass walls? The impact of digital training programs on women in conservative communities [endline in progress, AEA registry here]*

First, I study whether digital business training programs can be effectively delivered to women on their mobile phones. Working with clients of a microfinance institution, I invite aspiring and current female entrepreneurs to attend a virtual training program on how to start and grow a business. I randomize interested women into 1) a control arm, (2) a training only arm, and (3) a training and social media exposure arm. The third arm places participants in WhatsApp chat groups and exposes them to a curated feed of online business pages and tutorials. Given the low rates of economic participation by women in Jordan, the context that I study, the intervention is meant to explore whether digital networking sites can be leveraged to enhance women's access to collaboration and learning opportunities that they might otherwise lack.

2- *Beyond friends and family: the impact of digital market access on female entrepreneurs [baseline design in progress]*

While entrepreneurs often rely on friends and family to kickstart their businesses, outgrowing these might be necessary to diversity income sources, increase revenue, and formalize practices. For female entrepreneurs, however, mobility constraints and family obligations might limit access to markets outside of owners' social networks. This project explores the extent to which social media platforms, widely accessible in developing countries, can help connect female entrepreneurs to wider markets. In the context of Jordan, I surveyed microfinance clients to document that digital marketing is correlated with a lower percent of friends out of clients, higher revenue, and less informal practices. To test whether these correlations are causal or simply reflect owner and business characteristics, I partnered with local Jordanian influencers to develop a digital marketing training tailored for women from low-income backgrounds. The training, along with digital marketing logistical support, will be randomized to interested participants by March 2022, with the aim of understanding impacts on business owners' networks, income, and practices.

In addition to this research agenda in Jordan, I am involved in coauthored work with Professor Edward Glaeser, Professor Michael Luca, and a research team at Facebook around small businesses on the platform.

My interest in attending this bootcamp is rooted in my desire to better understand the literature on entrepreneurship and entrepreneurial finance and to meet researchers within these fields. My qualitative and quantitative work in Jordan suggest an important link between market access and liquidity constraints that small businesses face. On one hand, businesses rely on friends and family to raise capital and to maintain loyal customers. On the other hand, in the absence of consumer credit in many developing countries, these same businesses often have to provide store credit ("or buy now and pay later" services) to customers within their social networks. Such informal requests further limit businesses' liquidity. Given that market access, liquidity, and business practices are all correlated with business size and potential, I'm hoping that this bootcamp can help me learn about frameworks that allow me to better formalize and investigate these issues.

HARVARD Kennedy School
JOHN F. KENNEDY SCHOOL OF GOVERNMENT

Rema Hanna
Jeffrey Cheah Professor of South-East Asia Studies
Director, Evidence for Policy Design (EPoD)

(617) 496-1140
Rema_Hanna@hks.harvard.edu

Harvard Kennedy School
Rubenstein 340, 79 John F. Kennedy Street, Box 26
Cambridge, Massachusetts 02138

www.hks.harvard.edu

January 20, 2022

To whom it may concern:

I am writing in support of Layane Alhorr's application to the 2022 entrepreneurship research bootcamp. Her research projects revolve around credit and market constraints to female entrepreneurship in developing countries, topics she hopes to further delve into through the bootcamp.

I started mentoring Layane at the start of her Ph.D. and have been meeting with her regularly since. She is additionally supported by faculty members with expertise on entrepreneurship, microfinance, and networks such as Tavneet Suri, Asim Khwaja, Edward Glaeser, and Emily Breza.

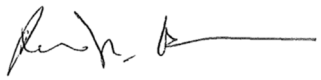
Since passing her qualitative exams, Layane has been interested in research at the intersection of entrepreneurship, gender, and digitization. Working in developing countries, she spends time doing qualitative and quantitative fieldwork to understand the financial and non-financial barriers which could be limiting high-growth entrepreneurs. She is particularly interested in understanding whether and how digital access can be inclusive to women facing constraints on their mobility and time outside the home. She is currently running field experiments that randomly grant entrepreneurs access to digital training and to digital marketing and hopes to evaluate outcomes on businesses' performance, practices and liquidity. Through the bootcamp, she is hoping to bolster her understanding of the conceptual frameworks and empirical evidence on entrepreneurship research in the hopes of better placing her agenda and expanding on it in the future.

Layane has successfully defended her prospectus and has been making steady progress on her research despite the uncertainty around fieldwork. She has demonstrated exceptional resilience and dedication in pushing her research forward despite setbacks during a global pandemic. She has successfully collected close to 2,000 phone surveys in the wake of COVID-19,

all while teaching remotely in a different time zone and working on co-authored projects with faculty. Although the pandemic forced her to abandon projects that required face-to-face surveying, she worked diligently to establish a new partnership, explore feasible projects, and launch an exploratory survey. Throughout, she remained dedicated to an agenda around female entrepreneurship in developing countries and hopes to keep working on it in the future.

I sincerely hope you look favorably upon her request and remain at your disposal for any future enquiries.

Sincerely,



Rema Hanna
Jeffrey Cheah Professor of South-East Asia Studies
Harvard Kennedy School