Cover letter – NBER Entrepreneurship Research Boot Camp 2014

Personal Contact Information:
Emanuele Colonnelli
51 Dudley Lane
Stanford University, Escondido Village
Stanford, CA 94305
Phone: (650) 575-9917
Primary Email: emacol@stanford.edu
Secondary Email: e.colonnelli@gmail.com

Contact Institution:
Department of Economics, Stanford University
Landau Economics Building
579 Serra Mall
Stanford, CA 94305-6072
Phone: (650) 725-3266
Fax: (650) 725-5702
Email: econ@stanford.edu

Recommendation Letter Writer:
Professor Joshua D. Rauh
Stanford Graduate School of Business
Senior Fellow, Hoover Institution, Stanford University
655 Knight Way
Stanford, CA 94305
Email: Rauh_Joshua@gsb.stanford.edu

Emanuele Colonnelli

CONTACT INFORMATION

Department of Economics, Stanford University
Stanford, CA 94305, USA

mobile: +1 650 5759917
e-mail: emacol@stanford.edu

EDUCATION

Stanford University, Stanford, CA, USA

PhD in Economics **Expected: June 2017**

- Primary Fields: Corporate Finance, Industrial Organization
- Research Interests: Entrepreneurship, Innovation, Emerging Economies

Bocconi University, Milan, Italy

MSc in Economics and Social Sciences (cum laude) **December 2011**

University of Siena, Siena, Italy

BA in Economics (cum laude) **September 2009**

Oxford University, Oxford, UK

BA in Economics and Management (1st class, exchange) **June 2009**

ITCG Umberto I, Ascoli Piceno, Italy

High School Diploma (100/100) **July 2006**

RESEARCH IN PROGRESS

to be updated soon (contact me via email for details on the papers in progress)

PROFESSIONAL EXPERIENCE

Stanford University, Department of Economics, Stanford, USA

Research Assistant **September 2013 – present**

Research assistant on the mobile innovation project to Professor Timothy Bresnahan.

IFMR Rural Finance, Chennai, India

Research Intern **June 2013 – July 2013**

Research project in finance and entrepreneurship of small businesses in rural India.

Innocenzo Gasparini Institute for Economic Research, Milan, Italy

Research Assistant **September 2011 – June 2012**

Research assistant in development and political economics to Prof. Eliana La Ferrara.

International Student Initiative for Economic Development, Edinburgh, UK

Director and Founder **September 2009 – present**

Director and founder of the no profit organization ISIED. The two main projects carried out so far are the 2011 London Development Forum (LSE), and the Art Malawi project (ongoing).

The Rockwool Foundation, Karonga, Malawi

Field Research Assistant **July 2010 – October 2010**

Research assistant on the field in Karonga, Malawi, to Prof. Christopher Ksoll (Oxford University) and Prof. Helene Bie Lilleor (Copenhagen University).

Grameen Bank, Dhaka, Bangladesh

Summer Intern **August 2009**

Honours and Awards

"Giorgio Mortara" Scholarship, Bank of Italy, 2014-2015
Graduate Fellowship, Department of Economics, Stanford University, 2012-2017
Graduate Merit Award (full), Bocconi University, 2009-2011
Bauer Studentship (declined), Gonville and Caius College, Cambridge University, 2010
Cambridge Trust Bursary (declined), Cambridge University, 2009
Luano Niccolai Foundation Scholarship (declined), Luano Niccolai Foundation, 2009
Erasmus Scholarship, EU and University of Siena, 2008-2009

Refereeing Activities

Games and Economic Behavior.

Programming

STATA, Matlab, Python, SQL, ArcGIS, LaTeX 2_ε.

Languages

Italian (mother tongue), English (fluent), Spanish (basic), German (basic).

PhD Courses

Main Field Courses:

- Empirical Corporate Finance (A+)
- Advanced Empirical Corporate Finance (A+)
- Corporate Finance Theory (in progress)
- Industrial Organization I (A)
- Industrial Organization II (A)
- Industrial Organization III (in progress)

Other Courses:

- Real Analysis (A+)
- PhD Micro (A-)
- PhD Macro (A+)
- PhD Econometrics (B+)
- Quantitative Methods for Empirical Research (A+)
- Development Economics (A)
- Economics of Innovation and Technical Change (in progress)

Research Statement – NBER Entrepreneurship Research Boot Camp 2014

I am a second year PhD student in Economics at Stanford University, working under the supervision of both Professor Josh Rauh and Professor Timothy Bresnahan. My primary fields are empirical corporate finance and empirical Industrial Organization, and my main research interests lie at the intersection of entrepreneurship and innovation. I am particularly interested in understanding the business dynamics and main constraints to growth faced by young innovative startups. I also have a special interest in studying these issues in emerging economies.
I believe that attending the NBER Entrepreneurship Research Boot Camp would be a fantastic opportunity to both gain a firm understanding of the research frontier in entrepreneurship, and to create a strong network of young and experienced collaborators that is essential for high-quality research.

I am currently working on several distinct research projects, which I believe are very representative of my current personal research interests.

First, I am part of the Mobile Innovation Group lead by Professors Tim Bresnahan and Pai-Ling Yin, which aims at providing a comprehensive framework for understanding mobile platforms and mobile developers. I am primarily involved in the entrepreneurial side of the research, and we are at a relatively preliminary stage of three research papers.
One looks at how is the impact of capital investments on young firm's performance and strategic decision making influenced by the firm's market position relative to competitors, by the capital raised by proximate competitors, and by the competitive turbulence of a young firm's market. A second one studies the extent to which there is alignment between the factors that drive entrepreneurial entry in a market and the factors that attract resource providers (venture capital and angel investors). Finally, we look at what is the impact of receiving early stage financing on different measure of firms' strategy, such as advertising, their multi-homing decision, and product experimentation.
All these projects rely on a unique and extremely detailed dataset that we are constructing, which contains information on the whole universe of mobile app developers and mobile apps, complemented with Crunchbase and LinkedIn publicly available data.

I am also working with Professors Shai Bernstein and Arthur Korteweg at Stanford Graduate School of Business on a project on entrepreneurial finance. We are working with AngelList, a large online platform of startups and investors that aims to make the fund-raising process more efficient, to analyze their data and work on a descriptive paper to provide a deep understanding of the decision making process of angel investors. In particular, we have the unique opportunity to see which startups the angel investors are considering, which ones survive the first selection stage, and which ones eventually obtain financing. Moreover, we have full data on all

the information the angel investors have access to, which allows us to identify which are the key determinants of success and failure in the world of angel investments.

Together with another Stanford PhD student, I am also involved in a field project that looks at the role of networks in the growth of small entrepreneurs and the diffusion of knowledge. We have designed a mobile platform that allows micro-entrepreneurs in Ghana to collaborate on business projects and share entrepreneurial ideas. We are now waiting for the results of several grant research proposals we submitted, and we have partnerships with both Facebook, Airtel Ghana (a mobile service provider), and the local NGO VEG (which is primarily dealing with financial service provision) to implement the project. We have the unique opportunity to randomize Internet access and access to the mobile platform, and the partnership with Facebook will give us extensive network data to work with. The main hypothesis we want to test is whether a flexible internet-based platform of interaction can be a good substitute for rich social networks in the promotion of entrepreneurship and innovation.

Finally, jointly with a classmate of mine, I am working on a research idea that links corruption and trust with bank lending and firm investment. In particular, we focus on Brazil, an emerging economy that provides us with a unique natural experiment that involved the random auditing of municipalities and the subsequent public disclosure of the findings of these audits. We exploit this exogenous variation in the levels of perceived corruption (and trust) across municipalities to look at the effect on creditors' and firms' behavior in response to such news. This project aims to shed light on a specific friction to firm growth – corruption – that has received little empirical evidence, but that can be extremely important, especially in the context of less developed countries.

As for my future research direction, I feel like it is too early to make a definitive and precise statement. I am extremely passionate about the interrelations between entrepreneurship and innovation, and I believe progress in this research area necessitates a better and more rigorous understanding of the role played by young dynamic companies. This is one of the broad topics I would love to focus on during my PhD studies. At the same time, I am extremely curious about frictions to firm growth at the local level, such as perceived levels of trust and corruption. Finally, I believe that knowledge of the strategy of and challenges faced by young companies in emerging markets is an area where original research is needed, and I hope I can contribute to generate and analyze interesting datasets that are presently quite rare.

In conclusion, I really hope that you find my research work and interests promising for the field of entrepreneurship research, and that you are convinced that I can be a great fit for the 7th NBER Entrepreneurship Research Boot Camp. I am looking forward to hearing from you soon. Thank you in advance for the consideration.

Emanuele Colonnelli

Joshua D. Rauh
Professor of Finance

Knight Management Center
Stanford University
655 Knight Way
Stanford, CA 94305 USA
T +1.650.723.9898
rauh@stanford.edu

To: Professor Thomas Hellman
From: Professor Joshua Rauh
Re: Application of Emanuele Colonnelli

I write this letter in strong support of Emanuele Colonnelli's application for the 7th Entrepreneurship Research Boot Camp (EBRC).

I got to know Emanuele when he took my PhD class called Advanced Empirical Corporate Finance (Finance 633) here at Stanford during the Winter Quarter of 2014. This course is a highly interactive reading course, requiring students to give conference-style discussions of papers on the reading list nearly every week of the quarter. It is part of the required courses for PhD candidates in finance, and is also regularly taken by PhD candidates in accounting at the GSB, economics at the GSB, and students from the economics department. In the reading list, I emphasize the most current research, including recently successful job market papers and publications. Students select papers each week from the available papers, and Emanuele naturally gravitated towards several on the drivers of innovative activity.

Emanuele was the top student in the class. He was consistently able to convey the economic intuition behind the papers as well as to provide deep analysis of the strengths and weaknesses of the statistical analysis. Key to the success of students in the course, and in doing research in empirical corporate finance more generally, is the ability to understand identification strategies. Specifically, what is the casual relation that a paper or project is testing, what would the ideal experiment to test this hypothesis entail, how far away is the real world setting from that ideal experiment, and what are the threats to external and internal validity? Emanuele was consistently excellent at drilling down to the key identifying assumptions in the papers he discussed, but also did a great job at analyzing the underlying economics. He has a deep understanding of empirical work and analysis in this area.

Furthermore, in my view, Emanuele is one of the best PhD students anywhere at Stanford working on applied microeconomic topics generally, and he is certainly the best PhD student who has a strong interest in Entrepreneurial Finance.

Emanuele is already working on a very interesting portfolio of research projects and in terms of research is well ahead of where most PhD students are at this point in the top PhD programs. He is engaged as a research assistant on two very promising projects related to entrepreneurship, one with Tim Bresnahan and the other with Shai Bernstein and Arthur Korteweg. The Bresnahan project examines the factors

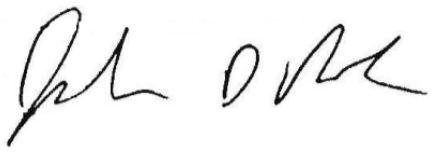
driving entrepreneurial entry in the mobile platforms and development. The Bernstein-Korteweg work, which I have talked with Bernstein extensively about, examines angel investments. By selecting these projects and working with these professors, Emanuele has shown a commitment to entrepreneurship research.

On his own, Emanuele is working other PhD students on two very interesting projects: one that exploits the random auditing of Brazilian municipalities to understand the effects of corruption on bank lending, and one that examines the role of networks in the growth of small entrepreneurs in Ghana. This latter project will involve randomized access to a mobile platform and has the potential to solve the endogeneity problems that often crop up in research on networks and entrepreneurship. I have extremely high hopes for both projects, particularly the latter.

Emanuele has an excitement about research ideas that is apparent in any conversation with him. He is a pleasure to speak with, is always thinking of creative new ideas with an eye towards where his ideas would fill gaps the existing literature. If I had to predict, in several years he will have a job at a top school and soon thereafter a number of top-tier publications in the economics and finance of innovation.

In sum, I strongly recommend Emanuele to this program without any hesitation.

Sincerely,



Joshua Rauh
Professor of Finance
Stanford Graduate School of Business