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David H. Hsu
Richard A. Sapp
Associate Professor of Management

March 27, 2015

Prof. Thomas Hellmann
Saïd Business School, University of Oxford
Park End Street, Oxford OX1 1HP, UK

Dear Thomas,

I am writing to offer my highest recommendation for **Andrea Contigiani**, who is applying to participate in this summer's NBER Entrepreneurship boot camp. Andrea is finishing his second year as a PhD student in the Management program at Wharton, and he is squarely interested in the domains of entrepreneurship and innovation. I have been involved with recruiting Andrea to our PhD program and supervising his research to date, and so I have direct knowledge of his quality. Let me speak about a project Andrea and I are collaborating on to illustrate his quality. Together with labor economist Iwan Barankay, the three of us have been developing a paper exploiting the across-US state variation in adopting a particular trade secrecy legal doctrine (the "inevitable disclosure" doctrine) and individual-level invention outcomes. Not only do we characterize the main innovation effect of this mobility-dampening legal doctrine, we try to unpack the two competing theoretical mechanisms that could be driving the negative relation we find. We also try to grapple with alternative explanations for the empirical patterns, as well as the issue of possibly endogenous state-level legal regime. Andrea has done all the empirical work on the project, which is no small task since we are dealing with around 3 million data points. He is quick in incorporating feedback, and has offered many good ideas in developing this project. I am hopeful the project will lead to a solid publication. I describe this project in a little bit of detail since it illustrates the advanced nature of Andrea's development (as compared to the amount of time he has been in the doctoral program). I think Andrea is starting to hot the sweet spot for the boot camp, which is far enough along in the program to be able to dig into the research papers in the boot camp, but with still plenty of time left in his doctoral studies to benefit from systematic coverage of the entrepreneurship and innovation literatures to shape his dissertation research. This would supplement the instruction he has received at Wharton. In summary, he has a capacity to learn a great deal from and contribute to the program. For that reason I strongly endorse Andrea's candidacy. Thanks for your consideration, and please let me know if you would like to clarify or discuss the above.

Best wishes,



David Hsu

Andrea Contigiani

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03-30-15

Dear Prof. Hellman,

I would like to apply to the NBER Entrepreneurship Research Boot Camp 2015. Please find attached my statement and my vita.

My advisor, Prof. David Hsu, will be sending his recommendation letter separately.

Please do not hesitate to contact me if you need any additional information.

Best,
Andrea Contigiani

Andrea Contigiani
03-30-15

Application to NBER Entrepreneurship Research Boot Camp 2015

STATEMENT of INTEREST

I am a PhD student in the Management Department at The Wharton School. Broadly speaking, I do research on innovation in the entrepreneurial context.

I would find extremely beneficial to join the NBER Entrepreneurship Research Boot Camp (ERBC). First, this workshop would be an excellent way for me to get a better understanding of where the entrepreneurship research is going, in terms of perspectives, questions, and methodologies. This would be particularly helpful at this point in time, as I am at the stage of choosing a topic for my dissertation. Second, I believe the approach of ERBC is very consistent with my approach. My training is mostly in economics. I use many of the tools of current mainstream applied econometrics. In addition, I have had exposure to structural estimation techniques through my PhD coursework. Finally, of course, ERBC is a unique occasion to interact with the top contributors to the field. Being able to discuss my research with them would be an immensely valuable opportunity.

My background is between business and economics. I got an undergraduate degree in Business at LUISS. I received graduate-level training in Economics first at Bocconi and then at UPenn. Finally, I moved on to the PhD in Management at Wharton. I am now completing the 2nd year in the program. I will be taking my field exam in Entrepreneurship and Strategy in mid May.

I have done research on various domains between strategy and applied economics. Before enrolling in my PhD program, I worked as research assistant for Raffi Amit, participating in various projects on entrepreneurship, strategy, and family business. In addition, I worked with Evan Rawley on entrepreneurial spawning. In fact, I am currently working with him and Rui de Figueiredo on a project exploring the effect of market structure on performance in the investment management context.

The exposure to various research domains was essential in helping me refine my research focus. As I entered the PhD program, I got fascinated by innovation in the entrepreneurial context and chose to focus on that area. I will now describe my current research activity over the next four paragraphs.

Currently my main project is a joint work with David Hsu and Iwan Barankay that studies the effect of inventor mobility on innovation performance. To shed light on this question, we use a specific trade secret law, the Inevitable Disclosure Doctrine (IDD), a state-level legal doctrine that limits employee mobility across firms. We exploit IDD in a difference-in-differences design to estimate the causal effect of a mobility decrease on innovation. To control for the potential residual endogeneity, we also employ an instrumental variable strategy, which is inspired by the literature on law and finance (La Porta & al, 1998, JPE). We find evidence that IDD has a negative effect on innovation. In addition, we attempt to analyze the channels that may be leading to this result. The evidence suggests this effect is driven primarily by the barrier imposed on knowledge recombination.

Along with existing knowledge, it is clear that motivation is another key input in the innovation production function. Recent literature highlights how scientists respond to a variety of different motives (Sauermann & Cohen, 2010, MgmtSci). This intuition seems particularly relevant to the entrepreneurial context. In this fashion, I am working on a joint project with Nikolai Roussanov

that studies how motive heterogeneity affects entrepreneurial decision-making. Starting from the idea that social status is an important driver of risk-taking behavior in entrepreneurs (Roussanov, 2010, JF), we analyze Panel Study of Entrepreneurial Dynamics (PSED) survey data to shed light on how different motives lead to different entrepreneurial choices. Furthermore, to increase the precision of the data, we are now in the process of circulating our own survey to a variety of entrepreneurial populations. In particular, our survey will help us get information about the variety of behavioral elements that matter to entrepreneurial decision-making (Astebro & al, 2014, JEP). This will allow us to get a more complete picture of the process, do a better estimation of the effect of motives on choice, and shed light on the channels that may drive these relations.

Motive heterogeneity is essentially about differences in preferences across individuals. However, incentives play an important role in innovation too. Manso (2011, JF) shows that financial incentives need to be structured in a certain way to spur experimentation. Manso & Ederer (2011, MgmtSci) offer nice experimental evidence of this thesis. However, much psychology literature has highlighted the dichotomy between extrinsic motivation and intrinsic motivation. Arguably, it is still an open question what the causal impact of intrinsic motivation on innovation is, especially because the interaction between intrinsic motivation and extrinsic motivation is still not well understood. In a separate project, I am working on designing a laboratory experiment where I randomize both shape of financial incentive and strength of intrinsic motivator, in order to identify the effect of both sources of motivation on innovative performance. Taking the view that entrepreneurship is essentially experimentation (Kerr & al, 2014, JEP), this empirical evidence will help understand how incentive design may drive entrepreneurial behavior.

Finally, I am working on my 2nd year paper, where I attempt to investigate the performance implications of acquisition strategy in the technology industry. In recent years, we have seen an enormous increase in the rate at which large technology firms acquire startups. Classic literature in strategy (Ahuja & Katila, 2001, SMJ) has provided some initial evidence on the relation between acquisition strategy and innovation performance. Recent literature in finance (Seru, 2014, JFE; Bena & Li, 2014, JF) has used a difference-in-differences approach to identify the causal effect of acquisition strategy on innovation performance. Most of this work measures innovation through patents and then makes implications about value. However, the relation between patents and value is still largely an open question. Hence, the existing work tells us little about whether or not the acquisition strategy most technology firms are taking does actually create value. Therefore, I believe it will be interesting to analyze how acquisition strategy affects economic performance. I am at the stage of collecting data to create a clean sample of technology-based acquisitions and soon will move on to the empirical analysis.

Andrea Contigiani
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Research Interests

Entrepreneurship; Innovation; Technology; Strategy.

Education

PhD in Management, The Wharton School, University of Pennsylvania, 2013-present
MS in Statistics, The Wharton School, University of Pennsylvania, 2013-present
MA in Economics, School of Arts and Sciences, University of Pennsylvania, 2010-2012
MS in Economics, Universita' Bocconi & Universite' Catholique de Louvain, 2007-2009
BS in Business Administration, LUISS, 2003-2006

Work in Progress

The Inevitable Disclosure Doctrine and Innovation (with Iwan Barankay and David Hsu)

Motivation and Entrepreneurship (with Nikolai Roussanov)

Imperfect Information and Slow Shakeout: Evidence from the US Hedge Fund Industry (with Rui de Figueiredo and Evan Rawley)

Extrinsic Rewards, Intrinsic Motives, and Experimentation

Acquisition Strategy, Technological Trajectory, and Performance

Research Experience

The Wharton School
RA for David Hsu, R&D Production Teams, Fall 2013
RA for Raffi Amit, Family Business and Corporate Divestitures, Fall 2012 – Spring 2013

RA for Nikolai Roussanov, Status Quest in Medieval Florence, Summer 2012
RA for Evan Rawley, Entrepreneurial Spawning in Mutual Fund Industry, Spring 2012

Teaching Experience

The Wharton School
TA for Nicolaj Siggelkow, Strategy Module in MGMT613 "Managing the Enterprise", EMBA, Summer 2015
TA for David Hsu, Strategy Module in MGMT612 "Managing the Emerging Enterprise", MBA, Spring 2015
TA for Jules van Binsbergen & Michael Roberts, FNCE611 "Corporate Finance", MBA, Fall 2014
TA for David Hsu, MGMT801 "Entrepreneurship", EMBA, Summer 2014
TA for Nicolaj Siggelkow, Strategy Module in MGMT613 "Managing the Enterprise", EMBA, Summer 2014
TA for Raffi Amit, MGMT804 "Venture Capital and Entrepreneurial Management", MBA, Fall 2013
TA for Urban Jermann, FNCE219-719 "International Financial Markets", MBA & UG, Fall 2013
TA for Karen Lewis, FNCE231-731 "International Corporate Finance", MBA & UG, Spring 2012
TA for Amir Yaron, FNCE219 "International Financial Markets", UG, Spring 2012
TA for Evan Rawley, MGMT719 "Organizational Economics and Strategy", MBA, Spring 2012
TA for Urban Jermann, FNCE219-719 "International Financial Markets", MBA & UG, Fall 2011

Honors

Mack Institute Research Fellowship (Research Fellowship, 2014-2015)
Russell Ackoff Doctoral Student Fellowship (Research Fellowship, 2014-2015)
Goldberg Barclay Term PhD Fellowship (PhD Fellowship, duration of PhD program)
Wharton PhD Fellowship (PhD fellowship, duration of PhD program)
EIEF Scholarship (scholarship for economics study abroad, Academic Year 2010-2011)
Premio Fausto Vicarelli (honorable mention, economics thesis competition, Sep 2010)
Amerigo Scholarship (scholarship for internship abroad, Summer 2007)
Erasmus Scholarship (scholarship for exchange program abroad, Fall 2005
Premio Ermanno Minardi (under-18 first prize, national literary competition, Jun 2002)

Service

Wharton Innovation Student Seminar, Co-Founder, Spring 2015
AOM Meeting 2015, Reviewer for divisions TIM and BPS, Spring 2015

Presentations

WIP Strategy Seminar, The Wharton School, The Inevitable Disclosure Doctrine and Innovation, Dec 2014

Certifications

Social & Behavioral Research IRB Training (100 %)
GRE General Test (quantitative 94% below; verbal 83% below; writing 49% below)
European Computer Driving License (successful achievement of 7/7 modules)
TOEFL (116/120)
DELE (92/100, intermediate level)
DFP Affaires (71/100, upper intermediate level)

Professional Experience

European Startup Initiative, Co-Founder, Belgium, 2012-Present
Wharton Entrepreneurship, Research Assistant, USA, Jun 2012 – May 2013
Jesa Investment & Management Consulting, Summer Consultant, China, Summer 2008
Merrill Lynch, Summer Analyst, USA, Summer 2007

Extracurricular Experience

Wharton Buxton Challenge 2014, Finalist, Fall 2014
Wharton PAC Case Competition 2014, 3rd out of 60+, Team Leader, USA, March 2014
BSIS International Conference 2012, Co-Organizer, Belgium, Spring 2012
Allianz Summer Academy 2009, Member of Bocconi Team, Germany, Aug 2009
Solvay Business Game 2009, Independent Participant, Belgium, Mar 2009
Harvard WMUN 2008, Member of Bocconi Team, Mexico, Mar 2008
Caritas Parrocchiale Corridonia, Voluntary Worker, Italy, during high school

Computer Skills

Office (advanced), Stata (advanced), Tex (advanced), MatLab (basic), R (basic), UCINET (basic), Bloomberg (basic), Python (basic)

Language Skills

Italian (mother tongue), English (fluent), Spanish (fluent), Portuguese (basic), French (basic), German (basic)

PhD Coursework

Year 1
Economic Foundations of Management (Dan Levinthal)

Sociological and Psychological Foundations of Management (Marshall Meyer)
Applied Econometrics 1 (Paul Shaman)
Entrepreneurship (Raffi Amit)
Family Business (Raffi Amit)
Research Methods (Katherine Klein)
Personnel Economics (Iwan Barankay)
Strategy (Harbir Singh)
Applied Econometrics 2 (Paul Shaman)

Year 2
Contract Theory (Daniel Gottlieb)
Industrial Organization in Healthcare (Bob Town)
Methods in Management Research (Witold Henisz)
Entrepreneurial Innovation (David Hsu)
Game Theory (Yuichi Yamamoto)
Network Theory (Lori Rosenkopf)
Empirical Corporate Finance (Todd Gormley)
Experimental Economics (Jeremy Tobacman)

References

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Evan Rawley
Roderick H. Cushman Associate Professor of Business
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