Brian Gibbons
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February 15, 2018

Professor David Robinson
Fuqua School of Business
Duke University
100 Fuqua Drive
Durham, NC

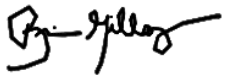
Dear Professor David Robinson,

I am writing to apply for admission to the NBER Entrepreneurship Research Boot Camp for the summer of 2018. I am a second year Ph.D. student in Finance at The Pennsylvania State University. Conversations with past alumni of the program have drawn my attention to both the quality and value of the ERBC. This program matches my research interests perfectly and would significantly improve my ability to do thoughtful research in this field.

My interest is in the area of entrepreneurial finance. In particular, I plan on investigating the complementarity (or substitutability) of venture capital and traditional bank financing for both early-stage and later-stage private firms. I am at an ideal point in my graduate career to capitalize on benefits of the program. I have completed my coursework and am familiar with the field, but I have time remaining to take the insights gained from the Boot Camp and apply them to new research projects.

The attached Curriculum Vitae and application essay provide additional information on my past experiences and my proposed research program. Professor Peter Iliev, my doctoral committee chair, will be writing a letter to attest to my unique qualifications and my interest in the subject. I am focused on performing cutting-edge research in the field of entrepreneurship, and I would greatly benefit from the knowledge and tools I would gain from attending the Boot Camp. Thank you in advance for your consideration and I look forward to hearing from you.

Sincerely,



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Application for Admission – NBER Entrepreneurship Research Boot Camp

Entrepreneurial finance is an exciting, yet challenging field of study. High-quality research requires that one must identify an important question and have the right tools, data, and institutional knowledge to answer it. In my first-year Ph.D. seminar class, I realized the extent of these challenges after presenting an analysis of the Kaufmann Firm Survey data. While influential research papers (Robb and Robinson, 2014) have used this data, it also has substantial issues not found in datasets of public firms. As a second-year Ph.D. student, I have decided to take on these challenges. I have narrowed down my interests to a few topics that focus on entrepreneurial finance. The NBER Entrepreneurship Research Boot Camp would be extremely beneficial at this point in my graduate school career, as it would provide me an excellent survey of the field and equip me with the right tools to further develop my own ideas over the remaining three years of my doctoral program and into my career.

After consulting extensively with my doctoral advisor Peter Iliev, I have begun a research program focusing on the complementarity or substitutability between traditional bank financing and venture capital for both early-stage and later-stage private firms. This is a critical line of research for two reasons. First, as Da Rin, Hellman, and Puri (2011) pointed out, this question is central to understanding the dynamics of entrepreneurial finance, but it has largely gone unanswered. Second, the answer to this question has direct policy implications, given that venture-backed companies are a very small subset of firms, but account for 5.3% to 7.3% of U.S. employment (Puri and Zarutskie, 2011). I have begun investigating how exogenous shocks to capital availability in a given locale affect the financing decisions and outcomes of entrepreneurial firms in that area. The results have been promising, and I am organizing a second-year Ph.D. paper around this topic.

Attending the ERBC would help me immensely in this regard. I would expect to arrive at the ERBC with a preliminary working paper on this topic. Discussions lead by influential scholars who have published in this area—including Professor Lerner, Professor Robinson, and Professor Stern—would give me the opportunity to learn the most current techniques in the field and think critically about my identification strategy. For instance, I am particularly interested in the recent work Dr. Stern has done to identify the characteristics of firms at birth most associated with future growth outcomes (Catalini, Guzman, and Stern, 2017). In fact, I have been using the aggregate county and zip code level data provided by The Startup Cartography Project to conduct my preliminary analyses. The syllabus cites authors whose work aligns closely with my proposed line

of research (Hellman, Lindsey, and Puri, 2007). However, much of the discussion is on other topics. The opportunity to hear experts discuss various lines of research would be valuable; it would better enable me to contextualize how my interests fit within the field as a whole.

My first two years in the Ph.D. program have been mostly spent on classwork in finance, econometrics, and microeconomic theory, as well as assisting professors with research and teaching. However, I have already had the opportunity to engage in a meaningful research project. For my first-year summer research paper, I examined how equity research analysts acquire information by linking server activity on the SEC's EDGAR website directly back to individual analysts. This initial investigation evolved into a paper titled "Analyst Information Acquisition via Edgar" with Peter Iliev and Jonathan Kalodimos. We expect to submit this paper to a top-tier journal by the end of the month. This paper did not specifically deal with the topic entrepreneurial finance. However, the setting of the paper provides an example of the direction I wish to take my future research. The complements or substitutes debate in entrepreneurial finance is held back by a lack of data and endogeneity issues. Similarly, the accounting literature deemed the analyst information acquisition process to be a "black box" (Bradshaw, 2011). In this paper, we used a creative method to generate unique data and provide answers to address a long-standing question.

Beyond my interest in the topic, there are a number of reasons why I am an excellent choice for the program. First, I have institutional knowledge and connections. My experience as an equity research associate and on a loan syndication desk at an investment bank are both relevant to the field. In particular, the time spent on the loan syndication desk gave me many insights regarding relationships between private firms and financial institutions. I frequently rely on my colleagues in industry for anecdotal evidence and to generate ideas, especially those working at start-ups, investment banks, or in private equity. Second, the finance department at Penn State has access to venture data through VentureXpert and facility members actively publishing on IPOs. Access to data and knowledgeable instruction are critical for success for any Ph.D. student. Last, I am a very engaged and active student—I am sure my reference letter will attest to this point. My experience as an equity research associate at Credit Suisse has given me the confidence to ask thoughtful questions to people with much more experience and knowledge than myself (e.g., asking the CEO/CFO of a large-cap firm a question on a quarterly earnings conference call). It also taught me the importance of making and facilitating connections between colleagues. I will be sure to bring this active curiosity and social knack with me to Boot Camp.

My academic career at Penn State, as well as my previous professional experiences, have prepared me to make the most of attending the NBER Entrepreneurship Boot Camp. The program is well suited to further my aptitude, knowledge, and passion for this field and I believe that I can, in turn, contribute to the continued success of the program.

References

Bradshaw, M. (2011). Analysts' Forecasts: What Do We Know after Decades of Work? *Working Paper*.

Catalini, C., Guzman, J., & Stern, S. (2017). Venture Capital Selection and Startup Growth. *Working Paper*.

Da Rin, M., Hellmann, T., & Puri, M. (2013). A survey of venture capital research. In *Handbook of the Economics of Finance* (Vol. 2, pp. 573-648). Elsevier.

Hellmann, T., Lindsey, L., & Puri, M. (2007). Building relationships early: Banks in venture capital. *The Review of Financial Studies, 21*(2), 513-541.

Puri, M., & Zarutskie, R. (2012). On the life cycle dynamics of venture-capital-and non-venture-capital-financed firms. *The Journal of Finance, 67*(6), 2247-2293.

Robb, A. M., & Robinson, D. T. (2014). The capital structure decisions of new firms. *The Review of Financial Studies*, *27*(1), 153-179.

Brian Gibbons

CONTACT

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EDUCATION

Pennsylvania State University — State College, PA
Ph.D., Finance, *Expected:* 2021

Ohio University — Athens, OH
B.B.A, Finance and Business Economics — *2014*
Magna Cum Laude
Honors Thesis: *Dynamic Inconsistency Among Emerging Adults*
Minor in History

RESEARCH PAPERS

1. "Analyst Information Acquisition via EDGAR"
(with Peter Iliev and Jonathan Kalodimos) Working paper available at:
https://papers.ssrn.com/sol3/papers.cfm?abstract$_i$d = 3112761

RESEARCH EXPERIENCE

Graduate Research Assistant — *2017-Present*
Alexey Zhdanov, Ph.D.
Peter Iliev, Ph.D.

Graduate Research Assistant — *2016-2017*
Anh Le, Ph.D.
Giang Nguyen, Ph.D.

PRESENTATIONS

Penn State University — *2016*
Ohio University Student Research Exposition — *2014*

INDUSTRY EXPERIENCE

Credit Suisse — *2013-2016*
Equity Research Associate: Electrical Equipment / Multi-Industry
Equity Research Associate: Large Cap Banks
Equity Research Summer Analyst: Electrical Equipment / Multi-Industry

KeyBanc Capital Markets — *2012*
Summer Analyst: Debt Capital Market Loan Syndication

TEACHING EXPERIENCE

Pennsylvania State University, Department of Finance

Instructor — *2017*
FIN 305 - Financial Management of the Business Enterprise
(Instructor Rating: 6.5 / 7, 14 / 18 responses)

Teaching Assistant — *2017-2018*
FIN 305 - Financial Management of the Business Enterprise

Teaching Assistant — *2016-2017*
FIN 581 - Fundamentals of Financial Markets
FIN 408 - Financial Markets and Institutions
FIN 406 - Security Analysis and Portfolio Management

Ph.D. Courses

2016-2017 School Year

Theoretical Corporate Finance
Empirical Corporate Finance
Applied Microeconomic Theory
Advanced Microeconomic Analysis
Econometrics I
Econometrics II

2017-2018 School Year

Theoretical Asset Pricing
Empirical Asset Pricing
Time Series Analysis
Advanced Research Estimation Methods
Applied Microeconometrics II
Empirical Research in Accounting

Honors and Awards

Pennsylvania State University

Robert Graham Endowed Fellow
Kenneth J. Carey Fellowship

Credit Suisse

#2 Ranked Team in Equity Research Department
#2 Ranked Team Globally among all Wall Street Brokers as voted by J.P. Morgan Asset Management

Ohio University

EAB Academic Excellence in Finance Award
Ohio University Gateway Excellence Scholarship
College of Business Copeland Scholars Award
College of Business Student Leader of the Year
AEP Finance Advisory Council Leadership Award

Skills

Coding: Stata, R, SAS, and Matlab
Language: English (Native), Spanish (Proficient)

References

Peter Iliev, Ph.D.
Associate Professor of Finance
Pennsylvania State University
Phone: (814) 863-5456
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Timothy Simin, Ph.D.
Associate Professor of Finance
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Associate Professor of Finance
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February 15, 2018

Dear Professor David Robinson,

I am excited to strongly recommend Brian Gibbons for a spot in the NBER Entrepreneurship Research Boot Camp 2018. I interviewed Brian when he applied to the Ph.D. program at Penn State, and I have been his doctoral committee chair over the last two years. Brian is currently completing his Ph.D. second year in our finance program. We have a co-authored paper on the analyst use of EDGAR as a research resource.

I want to start the letter by stating that in my ten years at Penn State I have never been involved with a Ph.D. student this early in their studies. Brian is a level above our usual students in his maturity, focus, drive, and execution. I have no doubt that he will complete our program successfully. Moreover, I have very high hopes for him being one of our stellar placements in a few years, and more importantly, in being a careful and productive researcher. Brian has chosen the field of entrepreneurship as an area to focus. I fully support his effort on this front, but I am a bit worried about his exposure to the entrepreneurship research field.[1] Penn State is not a group that is traditionally strong in this field and he will greatly benefit from a focused high-quality program that employs experienced and active researcher professors. By selecting him, the boot camp will add a lot of value to an outstanding student that will not have access to these resources otherwise.

Brian is an ideal candidate for the boot camp because he (a) is already involved in active research, (b) is discussing with me an entrepreneurship-focused dissertation proposal, (c) has the work ethic and initiative to do well in the long run, (d) has experience as an analyst that will help him in working as an effective corporate finance researcher and teacher. Let me elaborate on this points

I have a joint paper with Brian and Jonathan Kalodimos (at Oregon State) titled "Analyst Information Acquisition via EDGAR," available on SSRN. In the paper, we develop a novel dataset of the analysts level usage of the SEC main company-level disclosure

[1] As a side note, I am working on a research paper in the field, "Venturing Beyond the IPO: Financing of Newly Public Firms by Pre-IPO Investors," joint work with Michelle Lowry, R&R at the Journal of Finance. Therefore, I hope that I will be able to advise him through the treacherous PhD process.

PETER ILIEV
Associate Professor of Finance
Smeal College of Business
The Pennsylvania State University

database. We find that analysts rely on EDGAR in 26% of their estimate updates with an average of six filings viewed. The fundamental research on EDGAR is associated with a significant reduction in forecasting error and substantial and persistent abnormal returns. In this project, Brian started as a research assistant and was quickly upgraded to a co-author. He handles coding and data work, but he also helps with the specification and writing the paper. He is already a great co-author that is eager to learn.

Brian started working on the interplay between the availability of local financing, venture backing, and entrepreneurship success. In this project, he wants to use exogenous variation to identify shocks to financing that will help him identify the reliance on different sources of funding. While I am not sure if the project will "work out", it is impressive nonetheless that he understands what are the big questions and how to attack them in an intelligent manner.

On a more general note, Brian is a hard worker that is eager to learn and do things the right way. He has an impeccable work ethic, often working nights and weekends. I strongly believe that his two-year experience as an analyst in Credit Suisse led to his current drive. He knows what he wants, but more importantly, he knows that real achievements are based on hard work and initiative. His industry experience is already paying dividends in his research: he used Bloomberg scripts to help unscramble analysts name and companies in IBES. He uses his industry connections to reach out and confirm that our hypotheses actually make sense. He is also a great communicator with near stellar teaching evaluations in a class that he taught over the summer.

In short, Brian is a hard and focused worker with a great deal of industry knowledge and intellectual curiosity. He will benefit greatly from attending the NBER Entrepreneurship Research Boot Camp. I give him my strongest recommendation.

Please feel free to contact me if you have any questions.

Regards,



Peter Iliev
Associate Professor of Finance
Smeal College of Business
The Pennsylvania State University