April 2, 2012

NBER Entrepreneurship Working Group
Entrepreneurship Research Boot Camp
NBER Conference Department
1050 Massachusetts Avenue
Cambridge, MA 02138

Dear NBER Entrepreneurship Working Group,

I am writing to apply for the Entrepreneurship Research Boot Camp (ERBC). I am currently completing my Ph.D. in Financial Economics at the University of Chicago, Booth School of Business. I anticipate graduating in June, 2012 with a Ph.D. and an M.B.A. In August, I will join the Federal Reserve Bank of New York as an Economist in the Financial Intermediation Function.

Enclosed, please find the following documents:

1. My curriculum vitae, including a comprehensive summary of completed coursework.
2. An essay summarizing my interest in the program and my research.

In addition, a letter of recommendation will be forwarded to maranjian@nber.org from Professor Anil Kashyap (my dissertation committee chair).

Please feel free to contact me if you require any additional materials or information at (646) 425-5917 or mplosser@chicagobooth.edu. Thank you for your consideration.

Sincerely,

Matthew C. Plosser
5427 S Hyde Park Blvd.
Chicago, IL 60615

April 3, 2012

The University of Chicago
Booth School of Business
5807 South Woodlawn Avenue
Chicago, Illinois 60637
Tel. 773-702-7260
anil.kashyap@ChicagoBooth.edu

Anil K Kashyap
Edward Eagle Brown Professor of Economics and Finance and Richard N. Rosett Facuty Fellow

Dear Entrepreneurship Selection Committee,

I am writing to recommend Matthew Plosser who is completing his PhD, and will be starting a job at the Federal Reserve Bank of New York in August, for a position in the workshop. I first met Matt 3 years ago when I tried to hire him to work as my teaching assistant, but he got a more interesting offer to assist Gene Fama, so I did not get work with him in that capacity. Subsequently, I have seen him make several presentations in our workshops and about 18 months ago, when he decided that his dissertation would involve banking, he asked me to join his committee and subsequently be chair. Let me start by telling you briefly about his thesis work and then give some more general comments.

Matt's job market paper adds to the growing literature analyzing the effects of shocks to bank loan supply on the economy. In the last few years, a number of people have come up with ingenious tests to isolate disruptions to financial intermediation and trace those effects on borrowers. The papers that I find most convincing all come from emerging markets (Pakistan, Bolivia, Argentina) and Matt seeks to see if these effects are present in the U.S. To proceed, he notes that recent advances in oil and natural gas extraction have led to a huge expansion in the amount of oil and natural gas that can be recovered in the U.S. Matt documents that these advances (known as fracking) are leading to unexpected windfalls to landowners across the U.S. One important characteristic of fracking is that the equipment deployed in the extraction is highly specialized and operated by a relatively small number of national firms. So the investment that is needed to extract the resources is financed outside the local area. But, in many cases, wealth shock occurs in isolated areas with only a few banks. Matt shows that land owners in these areas tend to put the money into these banks. Matt explores what happens at the banks in the wake of one of these unanticipated deposit shocks.

Usually, we worry that banks which have better lending opportunities may try to actively attract deposits to fund the investments. So when we see deposits and loans moving together we cannot tell whether that is because the availability of deposits leads banks to lend or because the desire to lend leads banks to find deposits. By construction Matt's fracking shock eliminates this concern.

We still cannot be certain that the local wealth shock does not create other lending opportunities. To deal with this concern Matt contrasts the behavior of small and medium-sized banks in the fracking areas. The idea is that if windfall boosts local loan demand we would expect all banks in the area to accommodate that shift. Matt finds medium-sized banks and small banks responses differ in an interesting way. Between 2003 and 2006, when the overall economy was growing, both types of banks are prone to expand lending after the deposit shock. After 2007, when growth began to slow, the medium sized banks seem to continue to find ways to loan out the extra deposits while the smaller ones do not. Figuring out why the small banks were hoarding the liquidity is the next step in his agenda. But already the results show that even in the U.S. loan supply shocks can matter.

Matt also has a second, and very different, paper on LBO waves with two fellow PhD students, Valentin Haddad and Erik Loualiche. As has been widely observed, leveraged buyouts tend to be clustered. Haddad et al try to understand this timing. They do so by positing that the purpose of the LBO is to resolve an agency problem by more closely aligning the management and ownership of a firm. In particular, suppose that there is a standard agency problem that lowers a firm's profits and that this distortion to profits can be removed by taking the firm private. The problem is that the LBO requires the new owners to hold an undiversified claim on the firm which they find unattractive.

In this environment if the cost of funding fluctuates then the gains from LBOs will fluctuate. When risk premia are high, then the benefit of eliminating the profit distortion will be low and so few LBOs should occur. Similarly, when cash flow growth is expected to be high, risk free rates will be high, but it will still be a good time to take a firm private.

They introduce a model that makes this intuition precise and then test the model. Their predictions about the risk-free rate and the risk-premia are confirmed: LBOs do cluster when expected returns are low and when risk free rates are high. They find additional supporting evidence in the cross-section of firms by looking at which firms are bought out.

This pair of papers shows off Matt's skills. He has a wide range of interests. The identification insight in the fracking paper is quite clever, but making it operational required a huge amount of work to match the locations of the oil and gas discoveries to banks and then to assemble additional information on the activity in those areas. He came up with this idea entirely on his own and also tracked down all the necessary data. He works well with people. I expect him to be a highly sought after co-author and a valuable colleague. All of these skills bode well for his future success.

He is applying to this program because he thinks that access to finance may have important effects on business formation (Erik Hurst's work notwithstanding!). He sees this as a unique chance to learn from the top people in the field and to find out about the data that are available. I think he is exactly the kind of person you want in the program. I hope you will accept him. Please let me know if I can provide more information.

Sincerely,



Anil K Kashyap

MATTHEW C. PLOSSER

mplosser@chicagobooth.edu
http://home.uchicago.edu/mplosser/
5427 S Hyde Park Blvd.
Chicago, IL 60615
(646) 425-5917

I will be joining the Federal Reserve Bank of New York as an Economist in the Financial Intermediation Function in August.

EDUCATION

University of Chicago, Booth School of Business *2006-2012 (expected)*
Ph.D. in Economics with specialization in Corporate Finance, Asset Pricing and Labor, MBA

Princeton University *1997-2001*
A.B. Economics, *cum laude*

RESEARCH

Interests: Financial Intermediation, Entrepreneurial Finance, Corporate Finance

Working Papers:

Bank Heterogeneity and Capital Allocation: Evidence from Fracking Shocks (Job Market Paper)
This paper empirically investigates how banks of varying size invest an unsolicited inflow of deposits over the business cycle. I generate exogenous shocks to bank deposits by exploiting the development of new oil and gas fields using 'fracking' technologies that result in significant cash windfalls to landowners and large increases in local deposits. I compare the investment decisions of small- and medium-sized banks in response to these shocks and find that in normal times both types lend in response to a supply shock. The composition of their lending portfolio varies, with smaller banks investing more in 'soft' information intensive assets relative to larger banks. However, during the financial crisis small banks invest significantly less of their incremental deposits in loans, purchasing liquid assets instead. My findings suggest that during adverse times, even in a developed economy like the U.S., capital may become trapped inside several small banks.

Seeing the Forest Through the Trees: The Impact of Aggregate Discount Rates on Buyout Activity (with Valentin Haddad and Erik Loualiche)
We provide a novel explanation of leveraged buyout (LBO) waves based on the role of aggregate discount rates. We develop a model in which an LBO eliminates agency costs that impede the firm's growth but require investors to hold an undiversified position. Discount rates impact the value of a deal through two channels: the value of agency costs and the illiquidity premium demanded by buyout investors. We conclude that more LBOs should occur when risk-free rates are high and the risk premium is low. In a panel dataset of public companies from 1980 to 2009, we confirm that LBO activity is positively related to the risk-free rate and negatively related to expected excess returns. We find the aggregate discount rate explains a large portion of the time-series variation and is a more important determinant of activity than credit market factors. We find further support for our view in the cross-section; the model predicts firms with higher exposure to systematic shocks and higher idiosyncratic risk are less attractive LBO candidates. In the data, we find firms are less likely to privatize if they have a high market beta, residual variance, or cash flow volatility.

Work in Progress:

- *The Impact of the Healthcare Debate on Small Business Activity and Employment*
- *The Costs of Empire Building: Insider Ownership and Acquirer Returns*

TEACHING/RESEARCH EXPERIENCE

Instructor: Ph.D. Introductory Math Camp – Probability, Statistics, Econometrics, Fall 2009, 2010

Teaching Assistant Positions:

Course	Professor	Quarter
Investments (MBA)	Ralph Koijen	Winter 2009
Financial Markets and Institutions(MBA)	Douglas Diamond	Spring 2009, 2010
Investments (Citadel Investments)	John Heaton	Summer 2009, 2010, 2011
Money and Banking (MBA)	Randall Kroszner	Fall 2009
Financial Decision Theory I (Ph.D.)	Eugene Fama	Fall 2009

Research Assistant Prof. Randall Kroszner, Fall 2009

PROFESSIONAL EXPERIENCE

Scout Capital *2003-2006*

Hedge Fund Associate - Healthcare

- Sole healthcare analyst at a $2.4bn long/short, special situations hedge fund

J.P. Morgan Securities *2001-2003*

Investment Banking Analyst - Mergers & Acquisitions, Consumer/Healthcare

- Notable M&A transactions: CaremarkRX's $6bn acquisition of AdvancePCS; Heinz's $2.3bn reverse Morris Trust of its non-core North American businesses with Del Monte

HONORS AND AWARDS

- Wesley C. Pickard Ph.D. Fellowship 2009-2010
- Summer Paper Award 2007
- Booth School of Business Student Fellowship 2006-2009

COMPLETED COURSEWORK

Sequence	Courses
Microeconomics Core	Price Theory I, II, and III
Macroeconomics Core	Theory of Income I, II, and III
Econometrics Core	Empirical Analysis I, II, and III
Labor Economics	Human Capital, Advanced Price Theory, Empirical Labor Economics
Corporate Finance	Theory of Financial Decisions I, II and III
Asset Pricing	Asset Pricing, Topics in Empirical Finance
Miscellaneous	Advanced Industrial Organization II, Financial Accounting

REFERENCES

Anil Kashyap (Chair)
Edward Eagle Brown Professor of Economics and Finance
Booth School of Business, University of Chicago
Phone: (773) 702-7260
Email: anil.kashyap@chicagobooth.edu

Steven Neil Kaplan
Neubauer Family Distinguished Service Professor of Entrepreneurship and Finance
Booth School of Business, University of Chicago
Phone: (773) 702-4513
Email: steven.kaplan@chicagobooth.edu

Douglas W. Diamond
Merton H. Miller Distinguished Service Professor of Finance and Richard N. Rosett Faculty Fellow
Booth School of Business, University of Chicago
Phone: (773) 702-7283
Email: douglas.diamond@chicagobooth.edu

Amit Seru
Associate Professor of Finance and Neubauer Faculty Fellow
Booth School of Business, University of Chicago
Phone: (773) 834-2767
Email: amit.seru@chicagobooth.edu

MISCELLANEOUS

Personal Interests: Cooking, skiing, and watching football
Family: Married, two kids (twins)

Matthew Plosser **ERBC 2012 Essay**

I would like to attend the Entrepreneurship Research Boot Camp (ERBC) because I believe that my research would benefit from the curriculum. The Camp would familiarize me with the literature on entrepreneurial activity, introduce me to the data sets that address entrepreneurship, and allow me to network with other students interested in similar work. My current research efforts are tangentially related with topics in entrepreneurship and my goal is to improve these papers and initiate others that more directly address the reasons for time-variation in entrepreneurial activity.

I believe entrepreneurial activity is critical to growth, as it leads to increased innovation, higher employment, and greater wealth. But beyond cross-sectional differences in wealth, understanding entrepreneurship can help us to understand time-variation in economic activity and the potential sources of business cycle fluctuations. New firms are an important source of job creation, but they are also sensitive to unique constraints. Entrepreneurial activity can be limited by access to finance, the willingness of entrepreneurs to take undiversified risks, and the types of investment opportunities available in the economy. Time-variation in these forces can result in significant changes in the quantity and quality of entrepreneurial activity.

My current research in finance is closely related to these issues, but would benefit from a thorough review of the latest in the field. I focus on empirical financial research with particular emphasis on the variation in financial activity over time. I believe time-variation in financial activity is important for understanding the real economy. The channel by which financial forces impact the economy are often difficult to observe, but are particularly important for small businesses.

My dissertation explores how banks vary their capital allocation decisions in the cross section and over the business cycle by exploiting a novel shock to bank deposits. I find evidence of substantial heterogeneity in bank allocation decisions, primarily related to bank size. This is consistent with prior research, but what is unique to my results is that I find that small banks are much more sensitive to the financial crisis, sharply reducing their propensity to lend. These results may have a broader applications in exploring whether local bank size can limit the mobility of economic resources, particularly during downturns; regions with a legacy of small banks may face greater constraints on access to financing which would be particularly important for small businesses.

I have a parallel stream of work with two co-authors that explores how leveraged buy-out (LBO) activity varies with the aggregate discount rate. LBOs, like many other aspects of the corporate finance market, exhibit large swings in activity in response to market conditions. It

is difficult to explain these gyrations based on simple fundamentals. The empirical literature on LBOs suggests that booms in activity are often the result of 'hot' debt markets that may have behaviorial underpinnings. We examine an alternative story that suggests that aggregate risk premia, rather than cheap debt, explain the large swings in LBO activity. We model the LBO decision in the context of an economy with time-varying risk premia where LBO investors are required to take a relatively undiversified position. By combining a model of asset pricing with our model of the leveraged buy-out decision we are able to make some unique predictions of when LBOs occur and which firms are likely to LBO. We find empirical evidence, consistent with our results, suggesting that changes in aggregate rates may be an important determinant of LBO booms. We believe that these predictions can be extended to other investments that involve undiversified investors, including private equity and entrepreneurs.

Finally, I have conducted preliminary empirical work on how policy uncertainty may impact small business activity. Some have argued that large policy changes, including the prolonged healthcare reform debate, dampened the economic recovery by depressing small business investment. I explore this possibility by considering business activity during the two-year build-up to Massachusetts' enactment of a similar healthcare reform bill. I find that business and labor activity in Massachusetts was lower during this period, particularly in those sectors that would be most impacted by the new law. I also find considerable 'catch-up' growth following the passage of the healthcare bill. Additional work, using more detailed information from the U.S. Census, would allow me to expand on these results.

In different ways each of these projects relates to better understanding variation in entrepreneurial investment activity. My hope is that a coordinated program, such as the ERBC, will help me to improve these papers and allow me to conduct future research that is on the vanguard of the literature in entrepreneurship.