March 27, 2013

NBER Entrepreneurship Research Boot Camp (ERBC)
NBER Entrepreneurship Working Group

Dear Reviewer,

I am currently enrolled in the second year of the PhD program at the Department of Economics at Stanford University. I am writing to you to apply to the 6th NBER Entrepreneurship Research Boot Camp (ERBC) hosted by the NBER Entrepreneurship Working Group.

Attached is my Curriculum Vitae with past as well as current PhD courses and an essay explaining my motivation for attending the bootcamp including a description of my research interests.

My letter of recommendation will be sent by Nick Bloom directly to Brett Maranjinan. Nick can be reached at nbloom@stanford.edu.

Sincerely yours,

Megha Patnaik
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March 21, 2013

Dear Thomas,

Recommendation Letter for Megha Patnaik for the NBER Bootcamp

I am writing this letter to express my strong support for Megha Patnaik, a second year PhD student at our department in his application for the NBER Entrepreneurship bootcamp. I know Megha well as she is my Research Assistant right now working on management practices and family firms in India, and in fact we met up to discuss work when I was in Delhi for the NBER Neemrana event last December. She has an intriguing idea around how family firms maintain competitive advantage by "minimizing" tax payments – which you can pick up in Prowess data – and some nice natural experiments around this. The claim is that since family owners have large equity stakes in the firm and can trust each other, they have the incentives and ability to illegally reduce tax payments. This then overcomes the fact they have inferior productivity, from lower managerial ability, enabling them to stay in business. This is clearly very related to entrepreneurship as most of these firms are founder or second generation firms, and highlights how poorly enforced tax collection impedes the role of market forces in selecting high-ability firms.

I also know Megha from taking my labor class in which she was great. Finally, Megha also helped me prepare a draft for submission for my paper coauthored with Phillipe Aghion and John Van Reenen titled "Incomplete contracts and the Internal Organization of firms" forthcoming in the JLEO. The paper discusses the concept of incomplete contracts within the firm and looks at factors promoting decentralization and delegation of decision-making. Megha completed tasks given to her diligently and enthusiastically, and met her deadlines well.

Megha completed the labor economics course taught by me in the Winter 2012. The course focuses on non-structural applied micro and covers themes including workers and labor markets,

firms and goods markets, and peer-effects and other non-market interactions. Megha participated actively and contributed to class discussions. As part of the class, she also presented a paper on the reading list during which she demonstrated strong language and communication skills.

I highly recommend Megha as a candidate for attending the NBER ERBC organized by the NBER Entrepreneurship Working Group. She is bright, articulate (asking great questions in class) and is working very much on the topic, so would benefit the class and this would be a huge benefit to her too.

Yours Sincerely,



Nicholas Bloom

STANFORD
UNIVERSITY

Megha Patnaik

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Graduate

PhD candidate in Economics 2011-present
Stanford University

Year	Courses
I	Intermediate Econometrics I-III; Core Economics modules 1-12
II	Advanced Macroeconomics - I & III; Quantitative Methods for Empirical Research; Financial Economics - I & II; Labor Economics - II

Masters

MSc. Econometrics and Mathematical Economics 2009-2011
London School of Economics and Political Science

Year	Courses
I	Econometric Theory; Microeconomics for M. Sc. students; Probability and Statistical Inference.
II	Econometric Analysis; Macroeconomics for M. Sc. students; Advanced Microeconomics; Stochastic Processes; Developments in Statistical Methods .

Undergraduate

B. Sc. Honours Mathematics 2006-2009
St. Stephen's College, Delhi University

Year	Courses
I	Real Analysis I; Real Analysis II; Algebra; Vector Calculus and Geometry.
II	Probability and Statistics; Ordinary Differential Equations; Metric spaces and Topology; Statics; Group Theory; Numerical Analysis and Computer Programming.
III	Riemann Integration; Uniform Convergence; Ring Theory; Dynamics; Vector Spaces and Linear Algebra; Linear Programming and Game Theory; Number Theory; Partial Differential Equations.

Computing skills

Operating systems: Linux, OS X
Programming languages: MATLAB, R, Stata C, Fortran77
Other software systems: X12-ARIMA, LaTeX

Research Assistantships

Nick Bloom, Stanford University September 2012 - present
- Provided research assistance for paper titled "Incompelete Contracts and the Internal Organization of firms", JLEO forthcoming [1]

Jeffrey S. Hammer, Princeton University July to September, 2010
- Assisted in designing the questionnaire for in-depth study of four slums of the nature of citizenship and interactions with the state in Delhi and Noida, using mixed methods (ethnographic, household surveys, provider assessment) [2]

[1] http://www.nber.org/papers/w18842
[2] http://www.princeton.edu/rpds/research/citizens/

Ajay Shah, National Institute of Public Finance and Policy May to July, 2009
- Analyzed the potential role for smart cards in implementing India's food subsidy, as an input into a report by the Central Vigilance Commission for improving the Public Distribution System[3].

Consulting

Centre for Civil Society September, 2010
Analyzed data from the first education voucher study in India[4]. Examined how school characteristics impacted students' standardized test scores.

Internships

Department of Economic Affairs, Ministry of Finance, India May to July, 2007
Worked in the Capital Markets Division. Studied consumer protection issues of pension products sold by insurance companies. Met with insurance company executives, insurance agents and consumers. Submitted a policy recommendation report describing commission rates and issues of transparency in the Insurance industry.

Invest India Economic Foundation May to July, 2006
Studied demographic change and pension systems, focusing on the New Pension Scheme of the Government of India. Participated in an effort to design a household survey which studied income and savings in India. Examined existing household surveys and prepared a report supporting the case for a survey suited to the needs of financial services firms, researchers and government regulators in the field of pensions.

Volunteering

Mazdoor Kisan Shakti Sangathan February 2008
Participated in a 'social audit' conducted in Jhalawar district in Rajasthan, India. Using information made visible owing to the Right to Information Act of 2005, compared the official records of the state government regarding their employment guarantee schemes against testimonials of workers.

Reports & Research Papers

- *Who speaks for the poor?* with Jeffrey S. Hammer. In progress.
- *Impact of Education Vouchers - Study of the Delhi Voucher Project*, Centre for Civil Society, September 2010, New Delhi.
- *Consumer protection issues in pension products sold by insurance companies*, Department of Economic Affairs, Ministry of Finance, July 2007, New Delhi.
- *Towards a design of a new household survey database on the old age plans of households*, Invest India Market Solutions, July 2004, New Delhi.

Mass media

- *How to manage those who manage our money*, September 22, 2009, *Financial Express*, New Delhi.
- *A smart omission of commission*, August 14, 2009, *Financial Express*, New Delhi.

[3] http://www.prsindia.org/uploads/media/Food%20Security/Justice%20Wadhwa%20Committee%20Report%20on%20PDS.pdf

[4] http://schoolchoice.in/delhivoucher.php

I would like to attend the NBER Entrepreneurship Research Boot Camp as it is deeply linked with my interest in understanding the dynamics of firm growth and productivity, focusing on firms in emerging economies and the hurdles they face. Through my coursework and through reading and discussions, I have developed an interest in understanding the differences in productivity for firms in rich and poor countries. Differences in the mean size and productivity as well as the thicker left tail in the distributions have been documented by Bloom (2012) and Hseih & Klenow (2012) [1]. I am particularly interested in studying the relation of low productivity with the high incidence of family ownership in poorer countries as noted by Bertrand & Schoar (2006) and Bloom & Van Reenen (2007)[2].

In my current work, I argue that the tax regime in developing countries, which is characterized by high tax rates and low detection of tax evasion compared to the US and the OECD (Tybout, 2000) contributes to the high incidence of small and low productive firms. My preliminary results suggest that family owned firms tend to evade taxes when rates are high. They can thus compete with more productive firms with dispersed ownership which don't evade taxes.

I am also interested in studying how family members as managers (see Bloom et al., 2013) provide a better solution to the principal-agent problem in a country with poor trust, but may result in lower managerial ability since the pool of male family members is small. I am interested in how this lower ability translates into firm smaller size through weaker span of control. I would like to see if contracts which mimic the firm-family relationship can help increase productivity when rule of law is weak.

A separate idea I would like to explore the growth potential of a firm - consider some firms to be destined from birth for greater size and higher productivity, possibly arising from the "vision" of the entrepreneur, or more concretely through his entrepreneurial ability (see McKenzie and Woodruff, 2012). For example, when choosing to sell coffee, an entrepreneur can either decide to set up a street cafe, or decide to build a national chain of coffee shops - his own ability determines which he chooses. The difference in growth potential can show up for small firms through their investments as well as their compliance with labor laws and tax payment, as they anticipate scaling up. Schleifer & La Porta (2008) have used World Bank survey data to measure the degree of informality, and found poorer countries to have a larger informal sector. My contribution would be in linking informality to firm size through examining the firm's growth potential as arising from the rule of law [3].

[1] The literature on explaining the differences includes credit constraints (Banerjee & Duflo, 2008 and Schoar, 2009), restrictive labor laws (Besley & Burgess, 2004), poor trust and rule of law (Bloom et al., 2012), human capital of workers (Poschke, 2011), poor infrastructure (Sleuwaegen & Goedhuys, 2002), corruption (Murphy et al., 1993), high costs of compliance (Loayza, 1996) and high regulatory uncertainty (Markus 1981). All these effects can further interact and reinforce each other (see Jones, 2011).

[2] Bloom & Van Reenen (2007) argue that this is for historical reasons while Bertrand & Schoar (2006) link this to cultural differences in family values. Family values can in turn be rooted in low levels of trust and poor rule of law in the country - Bloom et. al (2012) argue that for their sample of Indian textile fims, an important predictor of firm size is the number of male family members in the family which owns the firm.

[3] Growth potential naturally interacts with the political factors and the stage of develop-

Given my research interests, I feel it would be a very enriching experience for me to attend the bootcamp. I would benefit hugely from attending the teaching sessions and interacting with the researchers, whose work I have read and whose seminars I have enjoyed here at Stanford. I would also look forward to meeting other graduate students working on related topics and building links for future research collaboration. I am certain the bootcamp will provide me exposure to new ideas and researc directions in areas related to my own, as well as foster a sense of belonging for the research community I aspire to be a part of.

ment (see Schoar 2009) - in countries with lower capital constraints and better rule of law, for example, even less visionary entrepreneurs can have high growth potential