

AAKASH KALYANI

PhD Economics · Boston University ◇ aakashk@bu.edu

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EDUCATION

Boston University PhD Economics (5th year) Fields: Macroeconomics, Finance, Labor Economics Advisor: Tarek Alexander Hassan	<i>2017-2023 (Expected)</i>
Delhi School of Economics, University of Delhi Masters in Economics First Division	<i>2013-2015</i>
Netaji Subhas Institute of Technology, University of Delhi Bachelor of Engineering in Electronics and Communication First Division	<i>2008-2012</i>

WORKING PAPERS

Measuring Creativity in US Patenting <i>Draft coming soon</i>	<i>2022</i>
Diffusion of Disruptive Technologies (link) with Nicholas Bloom, Tarek Hassan, Josh Lerner and Ahmed Tahoun	<i>2021</i>

WORK IN PROGRESS

International Migration and Knowledge Diffusion
Gender, Missing Innovations, and Economic Growth

WORK EXPERIENCE

Research Assistant to Tarek Hassan Boston University	<i>Jan. 2019 - May. 2021</i>
Teaching Assistant for Introductory Statistics Boston University	<i>Aug. 2018 - Dec. 2018</i>
Lecturer, Econometrics and Mathematical Economics Indian School of Business and Finance	<i>Jul. 2016 - Jul. 2017</i>
Research Associate Centre for Advanced Financial Research and Learning, Reserve Bank of India	<i>Jul. 2015 - Jul. 2016</i>
Analyst The Smart Cube, Delhi, India	<i>Jul. 2012 - July 2013</i>

FELLOWSHIPS

Henry S. Newman Graduate Student Fellowship Boston University	<i>Sep. 2021 - May. 2022</i>
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PRESENTATIONS

2022

- Green Line Macro Meeting (*Boston University-Boston College Joint Conference*);

PRESENTATIONS

2021

- Economic Growth Conference (*NBER Summer Institute 2021*); Economic Fluctuations and Growth Conference (*NBER*); Changing Nature of Innovation - Macro Perspectives (*Centre for Technology, Innovation and Economic Research, India*); Economics Seminar (*Duke University*)

2020

- Bocconi Assembly for Innovation and Cooperation (*University of Bocconi, Italy*); Economics Seminar (*Yeshiva University*); Economics Seminar (*Nova School of Business and Economics, Portugal*)

REFEREEING EXPERIENCE

Review of Economic Dynamics

TECHNICAL SKILLS

Python, MATLAB, Stata, R, LaTeX

LANGUAGES

English, Hindi

REFERENCES

Tarek Alexander Hassan

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CITIZENSHIP

F1, Indian Citizen

The Creativity Decline in US Patenting (Draft coming soon)

Job Market Paper

I use the texts of patents to separate creative from derivative patents. I show that only creative patents raise firm-level TFP and market valuations. I offer an explanation for the rise in patenting in recent years which has coincided with a productivity slowdown: the share of creative patents has fallen dramatically, largely because older inventors are less creative and entry into becoming an inventor has dropped. In other words, the bulk of the increase in patenting in recent years has been "derivative," not creative.

Diffusion of Disruptive Technologies (with Nicholas Bloom, Tarek Hassan, Josh Lerner and Ahmed Tahoun)

We identify novel technologies using textual analysis of patents, job postings, and earnings calls. Our approach enables us to identify and document the diffusion of 29 disruptive technologies across firms and labor markets in the U.S. Five stylized facts emerge from our data. First, the locations where technologies are developed that later disrupt businesses are geographically highly concentrated, even more so than overall patenting. Second, as the technologies mature and the number of new jobs related to them grows, they gradually spread geographically. While initial hiring is concentrated in high-skilled jobs, over time the mean skill level in new positions associated with the technologies declines, broadening the types of jobs that adopt a given technology. At the same time, the geographic diffusion of low-skilled positions is significantly faster than higher-skilled ones, so that the locations where initial discoveries were made retain their leading positions among high-paying positions for decades. Finally, these pioneer locations are more likely to arise in areas with universities and high skilled labor pools.