CONNIE LEE

Contact Information

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Education

Mines Paristech, PSL UniversityParis, FrancePh.D. Candidate in Economics2016 – Present

Dissertation: Essays on Firm Innovation

Paris School of EconomicsParis, FranceM.Sc., M2: Analysis and Policy in Economics2016

M1: Quantitative Economics and Finance (at Ecole Polytechnique)

Columbia University

New York, USA

B.Sc., Operations Research: Financial Engineering

2014

B.Sc., Operations Research: Financial Engineering
Minor in Computer Science

Research Interests

Innovation, entrepreneurship, applied microeconomics

Working Papers

"Buyouts and Innovation Incentives"

Abstract: This paper investigates how start-up innovation choices are affected by incumbent firm interactions. In particular, incumbent firms have an impact on start-up exit strategies as they can affect their expectations of getting acquired, of success, or of going bankrupt. Using the asymmetric effect of the 2008 financial crisis on firm access to financing between new entrants and incumbents, I infer a likelihood of getting bought out for entrants. I then estimate how an increase in the expectation of getting acquired affects a new firm's innovation choices with respect to the existing firms. I construct a novel measure of innovation proximity and show that new firms innovate "closer" to their potential acquirers.

"Firm R&D Inertia"

Abstract: Firm R&D decisions are likely to have lasting consequences. Here I will document patterns of firm technological position over its life cycle. Using patent data, I build a measure to compare the similarity between an innovative firm's technological contents over time with its technological position when it enters. I find that new entrants are likely to continue patenting in areas similar to their initial invention for multiple years – they exhibit inertia. I then describe how the degree of inertia is affected by initial conditions. The heterogeneous firm size distribution is also explored as is the effect of technology sector concentration.

"Regulation Timing on Green Innovation: The Case of Vehicle Emissions", joint with Matthieu Glachant and Antoine Dechezlepretre

Abstract: Does regulatory leadership lead to more innovation? Here we study this question through the case of vehicle emission regulations. There have been multiple rounds of increasingly stringent vehicle emission regulations that require firms to innovate in order to continue selling in those markets. Through the use of patent data, we identify the related technologies and firms and measure the quality of the innovation. We then use the staggered implementation of different levels of regulation to determine leader and laggard countries. The findings show that there are decreasing returns to late regulation implementation. Additionally, we provide evidence that firms with home countries that are regulatory leaders increase their innovation globally significantly.

Conference Presentations

2020	Dauphine Doctoral Workshop in Paris, France
2019	RCEA Growth, Innovation, and Entrepreneurship Conference in Waterloo, Canada Comparative Analysis of Enterprise Data (CAED) Conference in Ann Arbor, USA R&D Management Conference at Ecole Polytechnique in Paris, France CERNA Doctoral Seminar at Mines Paristech in Paris, France ZEW-Leibniz Seminar in Mannheim, Germany Young Economists Seminar, Telecom Paris in Paris, France
2018	i3 Conference on "The Regulation and Innovation Nexus: New Issues, New Perspectives" in Paris, France Druid Academy in Odense, Denmark SAEE student Workshop in Zurich, Switerland
2017	FAEE Student Workshop in Paris, France CERNA Doctoral Seminar at Mines Paristech in Paris, France

Teaching Experience

Columbia University

Consultant and Data Science Intern, Masae Analytics Team

Research Assistant to Professor Tim Leung, IEOR

Mathematics for Economists (Undergraduate level), Teaching Assistant Professor: Thierry Lafay, Sorbonne University	2019 & 2020
Fellowships	
Mines Paristech PhD Fellowship	2016 - 2019
Ecole Polytechnique Full Master Scholarship	2013 - 2015
Other Experiences	
College de France Research Assistant to Professor Philippe Aghion, Centre de l'économie de l'innovation	Paris, France 2017 – 2018
Agence Française de Développement Research Assistant to Professor Gael Giraud, Chair on Energy Prosperity	Paris, France 2017
Altai Consulting	Paris, France

Millennium PartnersNew York, USAQuantitative Analyst Intern, Commodities Team2014

2016

New York, USA

Citi New York, USA

Additional

References: Available upon request

Refereeing Service: Journal of the Economics of Transition

Computer Skills: Python, STATA, Matlab, R, C, C++, Unix, SQL

some experience with: Java, SAS, Ruby on Rails, VBA

Languages: English (native), French (working knowledge), Chinese (working knowledge)

Hobbies: Rock climbing, gardening, piano