#### **Contact Information**

Centre of Industrial Economics Mines Paristech, PSL University 60 Boulevard Saint Michel 75006, Paris, France

#### Education

**Mines Paristech, PSL University** Paris, France Ph.D. in Economics 2020 Dissertation: Essays on Firm Innovation **Paris School of Economics** Paris. France M.Sc., M2: Analysis and Policy in Economics 2016 *M1: Quantitative Economics and Finance (at Ecole Polytechnique)* New York, USA **Columbia University** Operations Research: Financial Engineering *B.Sc.*, 2014 *Minor in Computer Science* **Research Interests** 

Innovation, entrepreneurial financing, applied microeconomics

### **Working Papers**

"Buyouts and Start-up Innovation Incentives" (Job Market Paper)

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. I also explore the firm size distribution and technological sector concentration and discuss how the innovation strategies may differ.

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

phone: +33 (0) 7 52 62 61 25 email: connie.lee@mines-paristech.fr site: https://lee-connie.github.io citizenship: US & Canada 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 Druid Academy in Odense, Denmark SAEE student Workshop in Zurich, Switzerland	Paris, France
2017	FAEE Student Workshop in Paris, France CERNA Doctoral Seminar at Mines Paristech in Paris, France	
Teaching Experience		
Teachin Classes	ng Fellow (ATER in French) at the Management Department, Sorbonne University staught: Mathematics for Economists with Professor Thierry Lafay (undergraduate level) Industrial Economics with Professor Florent Pratlong (graduate level)	2020 - 2021
Mathematics for Economists (Undergraduate level) Teaching Assistant Professor: Thierry Lafay, Sorbonne University		2019
Fellow	vships	
Teachi	Feaching Fellowship at University Paris Sorbonne, Department of Management2020 - 202	
Mines Paristech Ph.D. Fellowship20		2016 - 2019
Ecole Polytechnique Full Masters Scholarship		2013 - 2015
Other	Experiences	
<b>Colleg</b> Resear	e <b>de France</b> ch Assistant to Professor Philippe Aghion, Centre for Innovation Economics	Paris, France 2017 – 2019
Agenco Resear	e <b>Française de Développement</b> ch Assistant to Professor Gael Giraud, Chair on Energy Prosperity	Paris, France 2017
<b>Altai (</b> Consul	C <b>onsulting</b> tant and Data Science Intern, Masae Analytics Team	Paris, France 2016
Columbia University Research Assistant to Professor Tim Leung, IEOR		New York, USA 2014

#### **Millennium Partners**

Quantitative Analyst Intern, Commodities Team

# Citi

Business Analyst Intern, Citi Velocity Team

## Additional

Refereeing:	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