Application: NBER 2020 PhD Workshop in Economics of AI

Maxime Bonelli

HEC Paris

Contact information

First name: Maxime

Last name: Bonelli

Position: 3rd year Ph.D. student in Finance at HEC Paris

Email: maxime.bonelli@hec.edu

Phone: +33-7-70-84-68-93

Address: HEC Paris - Finance Department, 1 rue de la Liberation, 78351 Jouy-en-Josas, France

Main academic advisor

Professor Augustin Landier

HEC Paris

landier@hec.fr

Additional academic references

Professor Denis Gromb
HEC Paris
gromb@hec.fr

Professor Bruno Biais
HEC Paris
biaisb@hec.fr

Professor Thomas Åstebro
HEC Paris
astebro@hec.fr

Maxime Bonelli

Address:
HEC Paris, Finance Department
1 rue de la Liberation
78351 Jouy-en-Josas, France

Contact:
maxime.bonelli@hec.edu
+33(0) 7-70-84-68-93

RESEARCH INTERESTS

Entrepreneurship, Technological Innovation, Investment Management Industry, Labor and Finance

EDUCATION

HEC Paris — Sept. 2017-2022 (expected)
Ph.D. Candidate in Finance

Ecole Polytechnique - ENSAE Paris - HEC Paris — 2017-2018
Master in Economics

Inria — 2013-2016
Ph.D. in Mathematics
Committee: N. El Karoui (chair) - E. Ghysels - L. Martellini - R. Elie - G. Hübner - M. Bossy

Ecole Polytechnique Federale de Lausanne (EPFL) — 2011-2012
M.Sc. in Applied Mathematics (exchange program), Statistics and Applied Probability

Ecole Polytechnique de l'Universite de Nice - Sophia Antipolis — 2008-2013
Engineering Degree (M.Sc.) in Applied Mathematics and Modeling

AWARDS AND INVITED WORKSHOPS

NBER Entrepreneurship Research Boot Camp	2020
NBER Tutorial on the Economics of Digitization	2020
Best Paper Award, 7th SUERF/UniCredit Foundation Research Prize	2019
Yale Summer School in Behavioral Finance, organized by N. Barberis	2019
Ph.D. class on Delegated Money Management, taught by J. Berk and J. van Binsbergen	2019
HEC Paris Foundation Scholarship for Excellence	2017-present
Nominated for the Best Paper Award, EFMA Conference	2015
French Ministry of Higher Education and Research CIFRE fellowship	2013-2016

NON ACADEMIC EXPERIENCE

Koris International

Head of Research, Quantitative Investment Strategies	2016-2017
Quantitative Research Engineer	2013-2016

List of all completed Ph.D. courses

Please find below a description of the courses of graduate study I pursued as part of the first two years of my Ph.D. (from September 2017 to June 2019), together with the names of professors and the grades I obtained (written in brackets). These courses are part of the Master in Economics jointly offered by HEC Paris, Ecole Polytechnique, ENSAE and ENS Paris-Saclay (http://www.master-in-economics.fr).

Major: Financial Economics (HEC Paris)

Corporate Finance Theory, *Denis Gromb* (18/20) - Dynamic Corporate Finance, *Bruno Biais* (18/20) - Empirical Corporate Finance, *David Thesmar and Adrien Matray* (18/20) - Banking and Financial Intermediation, *Guillaume Vuillemey* (16.23/20) - Digital Currencies and Blockchains, *Bruno Biais* (18/20) - Market Microstructure, *Stefano Lovo* (16/20) - Asset Pricing, *Thierry Foucault* (18/20) - Asset Pricing, Liquidity and Market Imperfections, *Johan Hombert* (18/20) - PhD Research Seminar - Topics in Finance, *Matthias Efing*

Minor: Labor Economics and Public Policy Evaluations (Ecole Polytechnique and ENSAE)

Entrepreneurship, *Thomas Astebro* (17/20) - Microeconometric Evaluation of Public Policies, *Bruno Crepon and Anett John* (18/20) - Urban Labor and Housing Markets, *Benoit Schmutz* (18/20) - Labor Economics, *Pierre Cahuc and Francis Kramarz* (auditing) - Economics of Education and Human Capital, *Christian Belzil* (auditing)

Additional courses: Macroeconomics (Ecole Polytechnique and ENSAE)

Macro-Finance, *Edouard Challe* (20/20) - International Macroeconomics, *Eric Mengus and Tomasz Michalski* (16.5/20)

Additional courses: Econometrics (Ecole Polytechnique and ENSAE)

Econometrics of Panel and Duration Data, *Laurent Davezies and Arne Ulhendorff* (auditing) - Structural Econometrics, *Christian Belzil* (auditing) - Machine Learning for Econometrics, *Christophe Gaillac and Jeremy l'Hour* (auditing)

Description of current and future research direction

My research is in corporate finance and aims at strengthening our understanding of the role the financial sector has in the diffusion among firms of new technologies, such as Artificial Intelligence. I am convinced that being enrolled in the NBER 2020 PhD Workshop in Economics of AI would greatly help me find the right direction in my research projects described below.

My first project studies the effects of data protection legislation on innovation and capital provision to high-tech firms. My goal is to assess the impact of policies restricting the use of customer data on the ability of data-related ventures to innovate and raise capital. The real effects of policies strengthening the protection of customer data are still unclear. On the one hand, these policies might boost innovation by data-savvy firms by improving their knowledge in managing and exploiting data, in particular using AI technologies. On the other hand, if the burden of regulation is too heavy, firms might be discouraged from engaging in new digitization initiatives and thus refrain from collecting and processing customer data. As a consequence, it might hinder firms' ability to innovate and negatively affect the amounts of capital raised by innovative high-tech firms.

My second project studies entry into entrepreneurship and subsequent entrepreneurial success, using French administrative data. The literature has shown that the majority of net job creations are done by a small fraction of specific startups (high-growth startups led by "transformational" entrepreneurs). Due to different levels and timings of adoption of technologies, skills leading to entrepreneurial success have varied over time and across sectors. At the same time, access to capital plays an important role in entrepreneurship. This project aims to assess which entrepreneurial features matter for growth, and relate these characteristics to the technologies and funding sources available at a particular time or in a given industry.