

Sylvain Catherine

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References

Professor David Thesmar
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Professor Augustin Landier
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Professor David Sraer
UC Berkeley, Haas School of Business
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Education

Graduate Studies

- 2012-17 HEC Paris – Ph.D. Candidate in Finance
Dissertation title: *“Essays in Financial Economics”*
Advisors: David Thesmar & Denis Gromb
Expected completion: June 2018
- 2017 Visiting scholar at MIT Sloan
- 2015-16 Visiting scholar at UC Berkeley Haas

Undergraduate Studies

- 2012 M.Sc. in Economic Theory and Econometrics, Toulouse School of Economics
- 2011 M.Sc. in Management (Finance major), HEC Paris

Research Interests

Entrepreneurial finance, Household finance, Corporate finance

Job Market Paper

“Keeping Options Open: What Motivates Entrepreneurs?”, 2017

To study the motivations of entrepreneurs, I develop a life-cycle model in which risk-averse individuals can become entrepreneurs and possibly return later to paid employment. While they are entrepreneurs, individuals learn about the productivity of their firm and enjoy nonpecuniary benefits. I estimate the model using detailed French administrative data which allow me to follow transitions in and out of entrepreneurship and to match entrepreneurs' employment records with their firm's accounting data. My main findings are as follow. First, estimated nonpecuniary benefits represent 6,700€ per year (some 15% of profits) and sum up to 74,000€ over the average entrepreneurial spell. Second, despite being small, nonpecuniary benefits are critical to entrepreneurship: without them, the number of firm creations would be cut by 16% and exit rates would increase so that overall the number of entrepreneurial firms would be 31% smaller.

Third, the option to return to paid employment is worth 82,000€ to new entrepreneurs. This option is equally important for entrepreneurship: it explains 19% of firm creations on its own, and 45% together with nonpecuniary benefits. Finally, entrepreneurs face large permanent productivity shocks, which generate substantial option value and drive the evolution of the firm size distribution.

Other Working Papers

“Countercyclical Income Risk and Portfolio Choices over the Life-Cycle”, 2017

I structurally estimate a life-cycle model of portfolio choices that incorporates the correlation between stock market returns and the cross-sectional skewness of idiosyncratic labor income shocks. The fact that skewness is cyclical can explain (i) why young households with modest financial wealth do not participate in the stock market and (ii) why, conditional on participation, the share of financial wealth invested in equity slightly increases with age until retirement. With an estimated relative risk aversion of 5 and yearly participation cost of \$290, the model matches the life-cycle profiles of wealth, of stock market participation, and of the conditional equity share observed among US households. Without cyclical skewness, estimated participation costs exceed \$1,000 per year and the model generates a counterfactual decline of the conditional equity shares over the life-cycle. Overall, cyclical skewness reduces aggregate demand for equity by 15%.

“Aggregate Effects of Collateral Constraints”, 2017

with Thomas Chaney, Zongbo Huang, David Sraer and David Thesmar

We structurally estimate a dynamic model with heterogeneous firms and collateral constraints. Embedding this model in a general equilibrium framework allows us to quantify the impact of financing frictions on aggregate output and welfare. The structural estimation is based on the causal effect of collateral shocks on firm level corporate investment in the United States. The estimates imply that lifting financing frictions would increase welfare by 9.4% and aggregate output by 11%. Half of this aggregate output gain is due to an increase in the aggregate stock of capital, one quarter is due to a larger aggregate labor supply, while the remaining quarter is due to a higher aggregate productivity from a better allocation of inputs across heterogeneous firms.

“A Certainty Equivalent Valuation of Social Security Entitlements”, 2015

This paper studies how US households should value Social Security entitlements. To do so, I set up a continuous time life-cycle model in which the stock and labor markets are cointegrated and Social Security benefits are wage-indexed. Then, I use data from the Survey of Consumer Finances to calibrate relative risk aversion by matching the evolution of equity holdings over the life-cycle. First, I find that the certainty equivalent of Social Security for working households is 46% lower than the sum of future cash flows discounted at the risk-free rate and negative for young households. Second, at the national scale, and taking into account retirees, the risk-adjusted value of Social Security entitlements is 19.6 trillion dollars, which is 37% lower than the unadjusted value of 31 trillion dollars. My findings suggest that the present value of pension entitlements and the transition cost to a funded system may be largely overestimated.

Work in Progress

“Working Capital and the Growth of New Firms”

with Jean-Noël Barrot, David Sraer and David Thesmar

“Cyclical Background Risk and Portfolio Choices: Evidence from Sweden”

with Yapei Zhang

Non Academic Publications

“Marché du travail : la grande fracture”, 2015

with Augustin Landier and David Thesmar

In this study for the think tank Institut Montaigne, we study the polarization of the French labor market and the causes of mass unemployment over the last three decades.

Conferences & Seminars

- 2017 NBER Summer Institute*, AFA*, University of Minnesota, Huebner Foundation Doctoral Colloquium, HEC Paris, ESSEC
- 2016 WFA*, HEC Paris PhD Workshop
- 2014 INSEAD PhD Workshop

**Presentations by coauthors*

Teaching Experience

- 2015 HEC Paris, Corporate Finance Theory (TA – MSc in Finance)
- 2014 HEC Paris, Financial Economics (Lecturer – Msc in Management)
- 2013-14 Paris V University, Introduction to Econometrics (Lecturer – Undergraduate)
- 2011 University of Toulouse, International Economics (TA – Undergraduate)

Grants & Summer School Invitations

- 2012-18 HEC Foundation, PhD Scholarship
- 2017 NBER Entrepreneurship Bootcamp
- 2017 Huebner Doctoral Colloquium Scholar
- 2013-15 Laboratory of Excellence in Economics and Decision Sciences, Scholarship
- 2014 Yale Summer School in Behavioral Finance

Non academic professional experiences

- 2011 Exane BNP Paribas, Equity Research, London (3 month internship)
- 2010 JPMorgan Chase & Co., Mergers & Acquisitions, Paris (6 month internship)
- 2009 Oddo Securities, Equity Sales, Paris (6 month internship)

Languages & Computer skills

- Languages French (native), English (fluent)
- Computer skills STATA, MATLAB, L^AT_EX