

SANTIAGO CAICEDO

scaiceso@gmail.com , scaicedosoler@uchicago.edu , s-caice1@uniandes.edu.co

<https://www.scaicedo.com/>

EDUCATION

- 2017 Ph.D. in Economics , University of Chicago.
- 2014 M.Sc. in Economics, University of Chicago.
- 2011 B.Sc. in Mathematics (Cum Laude), Universidad de los Andes, Colombia
- 2010 M.Sc. in Economics, Universidad de los Andes, Colombia.
- 2009 B.A. in Economics (Summa Cum Laude), Universidad de los Andes, Colombia.

RECENT RESEARCH

Publications

- 2019 *"Learning, Career Paths and the Distribution of Wages"*, with Lucas, R.E. and Rossi-Hansberg E. American Economic Journal: Macroeconomics. Vol. 11, No.1, January 2019 ([link](#))
- 2019 *"Note on Idea Diffusion Models with Cohort Structures"*, *Economica*, Vol. 86, Issue 342, pp. 396-408, 2019 ([link](#))

Working Papers

- 2019 *"Mandating Training in Firms: Theory and Evidence from Colombian Apprenticeship Program"*, with Miguel Espinosa and Arthur Seibold (JMP)
- 2019 *"Dancing with the Starts: Interactions and Human Capital Accumulation"*, with Akcigit, U. Miguelez, E. Stantecheva, S. and Sterzi, V. (R&R Econometrica)
- 2017 *"The Wage Distribution and the Convergence of Southern Cities"*, Working Paper.
- 2014 *"Incentives for Peace"*. Working Paper

Work in Progress

- 2018 *"Technology Diffusion and Absorptive Capacity"*

TEACHING EXPERIENCE

- 2017-2019 Lecturer Macroeconomics 3 -Growth Theory , Universidad de los Andes
- 2014-2016 TA Price Theory II and III for professors Roger Myerson, Phillip Reny and Balazs Szentes, University of Chicago
- 2014-2015 Lecturer Elements of Economic Analysis I, University of Chicago
- 2014 TA International Trade and Growth for professor Robert E. Lucas Jr, University of Chicago
- 2014 Lecturer Microeconomics II- General Equilibrium and Game Theory (Summer course), Universidad de los Andes
- 2011-2012 Lecturer Mathematical Economics, Universidad del Rosario
- 2007-2012 TA of Advanced Game Theory II (2011), Mathematical Economics (2010), Introduction to Colombian Economy (2010), Macroeconomics II (2009), Monetary Theory and Policy (2008), Probability and Statistics (2007), Universidad de los Andes

OTHER RESEARCH

- 2012 *"Countercyclical Banking Capital Buffers in a DSGE Model"*, with Estrada, D. and Laverde, M. Temas de Estabilidad Financiera, No.2, Banco de la República.
- 2010 *"Consumption, Credit Restrictions and Financial Stability: A DSGE Approach"*, with Estrada, D. Presented at Banco Central do Brasil.
- 2010 *"Bank Provisioning and Microcredit"*, with Estrada, D. and Mendoza, J. Temas de Estabilidad Financiera, No. 49.
- 2010 *"Un análisis de sobrevaloración en el mercado de vivienda en Colombia"*, with Morales, M. Pérez-Reyna, D. Temas de Estabilidad Financiera, No. 51.
- 2010 *"Effect on Households of Substitution between Loans and Investment"*, with Pérez-Reyna, D. Temas de Estabilidad Financiera, No. 52.

SCHOLARSHIPS AND AWARDS

- 2016-2018 Dissertation Scholarship, University of Chicago.
- 2012-2016 Central Bank Scholarship, Banco de la Republica.
- 2007 Ramón de Zubiría Scholarship. Awarded to the student with the highest GPA in the Economics program. Universidad de los Andes.

SUMMARY OF RESEARCH PROJECTS

Learning, Career Paths and the Distribution of Wages

With Robert E. Lucas Jr and Esteban Rossi-Hansberg

We develop a theory of career paths and earnings where agents organize in production hierarchies. Agents climb these hierarchies as they learn stochastically from others. Earnings grow as agents acquire knowledge and occupy positions with more subordinates. We contrast these and other implications with U.S. census data for the period 1990 to 2010, matching the Lorenz curve of earnings and the observed mean experience-earnings profiles. We show the increase in wage inequality over this period can be rationalized with a shift in the level of the complexity and profitability of technologies relative to the distribution of knowledge in the population.

Note on Idea Diffusion Models with Cohort Structures

In this note, I propose two alternative frameworks to study idea diffusion models with cohort structures. Both frameworks fix Lucas (2009) aggregation mistake while keeping the analytical tractability of the model and its insights. The frameworks differ in their assumptions on the meeting process. First, I study a continuous arrival process where agents meet others at each point in time, and then a more commonly used Poisson process where meeting opportunities arrive stochastically at some given Poisson rate. I generalize the growth formula in Lucas (2009) and show both models yield the same growth rate on a balanced growth path. Moreover, I show the continuous arrival process can be viewed as the limit of Poisson processes where the meeting rate increases but the quality of meetings decreases.

Dancing with the Stars: Innovation through Interactions

With Ufuk Akcigit, Ernest Miguelez, Valerio Sterzi and Stefanie Stantcheva

An inventor's own knowledge is a key input in the innovation process. This knowledge can be built by interacting with and learning from others. This paper uses a new large-scale panel dataset on European inventors matched to their employers and patents. We document key empirical facts on inventors' productivity over the life cycle, inventors' research teams, and interactions with other inventors. Among others, most patents are the result of collaborative work. Interactions with better inventors are very strongly correlated with higher subsequent productivity. These facts motivate the main ingredients of our new innovation-led endogenous growth model, in which innovations are produced by heterogeneous research teams of inventors using inventor knowledge. The evolution of an inventor's knowledge is explained through the lens of a diffusion model in which inventors can learn in two ways: By interacting with others at an endogenously chosen rate; and from an external, age-dependent source that captures alternative learning channels, such as learning-by-doing. Thus, our knowledge diffusion model nests inside the innovation-based endogenous growth model. We estimate the model, which fits the data very closely, and use it to perform several policy exercises, such as quantifying the large importance of interactions for growth, studying the effects of reducing interaction costs (e.g., through IT or infrastructure), and comparing the learning and innovation processes of different countries.