Flavio Calvino

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General Information

Birthplace	Busto Arsizio (VA) – Italy
Citizenship	Italian
Contact	flavio.calvino@oecd.org
Website	https://sites.google.com/view/flaviocalvino
Google Scholar	https://scholar.google.com/citations?user=stsBW8IAAAAJ

Current Position

Dec. 2016 – present
Organisation for Economic Co-operation and Development (OECD), Paris, France
Senior Economist
Directorate for Science, Technology and Innovation - Productivity, Innovation and Entrepreneurship Division
Initially Junior Economist (Dec. 2016 - Feb. 2020), then Economist (until March 2024), currently Senior Economist leading the Firms, Digital transformation and Technology Diffusion team. Focus on policy-relevant cross-country microdata-based analyses on AI, digital technologies, productivity, employment dynamics, twin digital-green transitions. Experienced also on entrepreneurship, business dynamism, innovation, and inclusiveness.

Education

Oct. 2014 – Oct. 2016
Paris School of Economics – Université Paris 1 Panthéon-Sorbonne, Paris, France
PhD in Economics (jointly with Scuola Superiore Sant'Anna)
Thesis: "Employment dynamics and Innovation. Five essays"
Advisors: Professor Giovanni Dosi (S. Anna) and Professor Angelo Secchi (PSE-Paris 1)

Sept. 2013 – Oct. 2016
Scuola Superiore Sant'Anna, Pisa, Italy
PhD – International PhD in Economics (jointly with PSE – Université Paris 1)
Thesis: "Employment dynamics and Innovation. Five essays"
Advisors: Professor Giovanni Dosi (S. Anna) and Professor Angelo Secchi (PSE-Paris 1)

Sept. 2010 – Oct. 2012
Bocconi University, Milan, Italy
MSc Economics and Management of Innovation and Technology
Major: Industrial and Innovation Economics
GPA: 29,2/30 – Final grade: 110/110 cum Laude
Thesis: "Pre-entry Experience and Firm Survival in the Semiconductor Industry";
Advisors: Professor Franco Malerba, Bocconi University and Professor Toke Reichstein, CBS

Sept. 2011 – Mar. 2013
Copenhagen Business School, Frederiksberg, Denmark
MSc Management of Innovation and Business Development – Double Degree
GPA: 10,9/12 – Thesis grade: 12/12
Other projects: Innovation trends in Green and Clean Technologies; Entrepreneurship for Development

Sept. 2007 – Oct. 2010
Bocconi University, Milan, Italy
BSc Business Administration and Management
GPA: 28,94/30 – Final grade: 110/110 cum Laude
Thesis: "Environment and Poverty in Developing Countries"; Advisor: Professor Renata Targetti Lenti

Experience

Dec. 2014 – Oct. 2016 **Organisation for Economic Co-operation and Development (OECD)**, Paris, France
External consultant – Directorate for Science, Technology and Innovation - Structural Policy Division
Working with Chiara Criscuolo and Carlo Menon on the DynEmp project. Focus on employment dynamics, entrepreneurship policy and firm dynamics.

Jul. 2014 – Nov. 2014 **Organisation for Economic Co-operation and Development (OECD)**, Paris, France
Trainee – Directorate for Science, Technology and Innovation - Structural Policy Division
Working under the supervision of Nick Johnstone, Chiara Criscuolo and Carlo Menon on the DynEmp project. Focus on entrepreneurship, employment dynamics, size-contingent policies and employment volatility.

Sept. 2013 – Oct. 2013 **University of Pavia**, Pavia, Italy
Research Assistant – Department of Social Sciences
Working with Professor Roberta Rabellotti on Italian industrial clusters and on Italian cluster policy, from a comparative perspective.

May 2013 – Jul. 2013 **Bocconi University**, Milan, Italy
Research Assistant – Centre for Research on Innovation, Organisation and Strategy
Working with Professor Franco Malerba and Roberto Fontana on patent trends in the semiconductor industry. Focus on innovation and industrial dynamics.

Oct. 2012 – Feb. 2013 **European Commission**, Brussels, Belgium
Blue Book Trainee – DG CONNECT, Innovation Unit
Working under the supervision of Viorel Peca on ICT and innovation policy. Designing the ICT Innovation Vouchers scheme (pilot project in the Digital Agenda for Europe). Working also on digital entrepreneurship, Smart Specialization and innovation-friendly taxation.

Mar. 2012 – Sept. 2012 **Bocconi University**, Milan, Italy
Research Assistant – Knowledge, Internationalization and Technology Studies
Working with Professor Franco Malerba and Roberto Fontana on evolution of industries and human capital. Focus on pre-entry experience and post-entry performance in the semiconductor industry.

Working Papers

Calvino, F., C. Criscuolo and A. Ughi (2024), "Digital adoption during COVID-19: Cross-country evidence from microdata", OECD Science, Technology and Industry Working Papers, No. 2024/03, OECD Publishing, Paris, DOI: 10.1787/f63ca261-en.

Calvino, F., C. Criscuolo, H. Dernis and L. Samek (2023), "What technologies are at the core of AI?: An exploration based on patent data", OECD Artificial Intelligence Papers, No. 6, OECD Publishing, Paris DOI: 10.1787/32406765-en.

Borgonovi, F., F. Calvino, C. Criscuolo, L. O'Kane, J. Nania, J. Nitschke, L. Samek and H. Seitz (2023), "Emerging trends in AI skill demand across 14 OECD countries", OECD Artificial Intelligence Papers, No. 2, OECD Publishing, Paris. DOI: 10.1787/7c691b9a-en

Calvino, F. and L. Fontanelli (2023), "Artificial intelligence, complementary assets and productivity: evidence from French firms", LEM Working Papers, No. 2023/35, Laboratory of Economics and Management, Pisa, Italy. Link: WPLem/files/2023-35.pdf

Calligaris, S., F. Calvino, M. Reinhard and R. Verlhac (2023), "Is there a trade-off between productivity and employment? A cross-country micro-to-macro study", OECD Science, Technology and Industry Policy Papers, No. 157, OECD Publishing, Paris. DOI: 10.1787/99bede51-en.

Calvino, F. and L. Fontanelli (2023), "A portrait of AI adopters across countries: firm characteristics, assets' complementarities, and productivity", OECD Science, Technology and Industry Working Papers, No. 2023/02, OECD Publishing, Paris. DOI: 110.1787/0fb79bb9-en.

Dernis, H., F. Calvino, L. Moussiegt, D. Nawa, L. Samek and M. Squicciarini (2023). "Identifying artificial intelligence actors using online data", OECD Science, Technology and Industry Working Papers, No. 2023/01, OECD Publishing, Paris. DOI: 10.1787/1f5307e7-en.

Calvino, F., L. Samek, M. Squicciarini, and C. Morris (2022), "Identifying and characterising AI adopters: A novel approach based on big data", OECD Science, Technology and Industry Working Papers, No. 2022/06, OECD Publishing, Paris. DOI: 10.1787/154981d7-en.

Calvino, F., et al. (2022), "Closing the Italian digital gap: The role of skills, intangibles and policies", OECD Science, Technology and Industry Policy Papers, No. 126, OECD Publishing, Paris. DOI: 10.1787/e33c281e-en.

Calvino, F., C. Criscuolo and R. Verlhac (2020). "Declining business dynamism: structural and policy determinants", OECD Science, Technology and Industry Policy Papers, No. 94, OECD Publishing, Paris. DOI: 10.1787/77b92072-en

Desnoyers-James, I., S. Calligaris and F. Calvino (2019). "DynEmp and MultiProd: Metadata", OECD Science, Technology and Industry Working Papers, No. 2019/03, OECD Publishing, Paris. DOI: 10.1787/3dcde184-en.

Bajgar, M., S. Calligaris, F. Calvino, C. Criscuolo and J. Timmis (2019). "Bits and bolts. The digital transformation and manufacturing", OECD Science, Technology and Industry Working Papers, No. 2019/01, OECD Publishing, Paris. DOI: 10.1787/c917d518-en.

Calvino, F. and C. Criscuolo (2019). "Business dynamics and Digitalisation", OECD Science, Technology and Industry Policy Papers, No. 62, OECD Publishing, Paris. DOI: 10.1787/6e0b011a-en.

Calvino, F., C. Criscuolo, L. Marcolin and M. Squicciarini (2018). "A taxonomy of digital intensive sectors", OECD Science, Technology and Industry Working Papers, No. 2018/14, OECD Publishing, Paris. DOI: 10.1787/f404736a-en.

Tsebe, M., V. Vukeya, C. Lewis, F. Calvino and C. Criscuolo (2018). "Firm dynamics in South Africa", OECD Economics Department Working Papers, No. 1528, OECD Publishing, Paris. DOI: 10.1787/92b26361-en.

Calvino, F., C. Criscuolo and C. Menon (2016), "No country for young firms? Start-up dynamics and national policies", OECD Science, Technology and Industry Policy Papers, No. 29, OECD Publishing, Paris. DOI: 10.1787/5jm22p40c8mw-en.

Calvino, F., C. Criscuolo and C. Menon (2015), "Cross-country evidence on start-up dynamics", OECD Science, Technology and Industry Working Papers, 2015/06, OECD Publishing, Paris. DOI: 10.1787/5jrxtkb9mxtb-en.

Publications in Peer-reviewed Journals

Calvino, F., D. Giachini and M. Guerini (2022). "The age distribution of business firms", *Journal of Evolutionary Economics, 32*, p. 205-245. DOI: 10.1007/s00191-021-00747-2

Calvino, F. (2019). "Technological Innovation and the Distribution of Employment Growth: a firm-level analysis". *Industrial and Corporate Change, 28* (1), p. 177-202. DOI: 10.1093/icc/dty003.

Calvino, F. and M. E. Virgillito (2018). "The Innovation-Employment nexus: a critical survey of theory and empirics". *Journal of Economic Surveys, 32* (1), p. 83-117. DOI: 10.1111/joes.12190.

Calvino, F., C. Criscuolo and C. Menon (2018). "A cross-country analysis of start-up employment dynamics". *Industrial and Corporate Change, 27* (4), p. 677-698. DOI: 10.1093/icc/dty006.

Calvino, F., C. Criscuolo, C. Menon and A. Secchi (2018). "Growth volatility and size: A firm-level study". *Journal of Economic Dynamics and Control, 90* (2018), p. 390-407. DOI: 10.1016/j.jedc.2018.04.001.

Calvino, F., C. Criscuolo, C. Menon and K. Ikeuchi (2017). "Start-up dynamics in Japan: Comparative evidence from the DynEmp v.2 database". *Japanese Economic Review, 68* (2), p. 188-199. DOI: 10.1111/jere.12130.

Chapters & Other Publications

Calvino F. and C. Criscuolo (2024), "Generative AI and productivity: Challenges, opportunities and the role of policy", Dynamics of Generative AI (ed. T. Schrepel and V. Stocker), Network Law Review, Winter 2023, https://www.networklawreview.org/calvino-criscuolo-generative-ai/

Agresti, S., F. Calvino, C. Criscuolo, F. Manaresi, D. Pilat, R. Verlhac (2022). "Meer aandacht voor bedrijfsdynamiek vereist na de coronacrisis", ESB 107 (4811S), 38-41, https://esb.nu/meer-aandacht-voor-bedrijfsdynamiek-vereist-na-de-coronacrisis/.

Calvino, F. and C. Criscuolo (2022). "Gone digital: Technology Diffusion in the Digital Era", in Qureshi, Z. and Woo, C. (Eds.), *Shifting Paradigms: Growth, Finance, Jobs, and Inequality in the Digital Economy*, pp. 35-72, Brookings Institution Press

Calvino, F. and V. Spiezia (2020). "The digital transformation and labour demand", in Zimmermann, K. F. (Eds.), *Handbook of Labor, Human Resources and Population Economics*, pp. 1-17, Springer, Cham. DOI: link

Blanchenay, P., C. Criscuolo and F. Calvino (2016), "Business dynamics and public policies: Cross-country evidence from new data". In Kauffman Foundation (Eds.), *New Entrepreneurial Growth Agenda*. Available at http://www.kauffman.org/neg/section-3.

Op-Eds

Borgonovi, F., F. Calvino and S. Piano (2024). "Pensiero e giudizio per convivere con l'intelligenza artificiale", LaVoce column available at https://lavoce.info/archives/103980/pensiero-e-giudizio-per-convivere-con-lintelligenza-artificiale/

Calligaris, S., F. Calvino, M. Reinhard and R. Verlhac (2023), "The productivity-employment nexus: Micro-to-macro insights from 13 countries", VoxEu column available at https://cepr.org/voxeu/columns/productivity-employment-nexus-micro-macro-insights-13-countries

Borgonovi, F., F. Calvino, C. Criscuolo, L. O'Kane, J. Nania, J. Nitschke, L. Samek and H. Seitz (2023), "Tracking the skills behind the AI boom: Evidence from 14 OECD countries", VoxEu column available at https://cepr.org/voxeu/columns/tracking-skills-behind-ai-boom-evidence-14-oecd-countries

Calvino, F. and L. Fontanelli (2023). "Firms' use of artificial intelligence: Cross-country evidence on business characteristics, asset complementarities, and productivity", VoxEu column available at https://cepr.org/voxeu/columns/firms-use-artificial-intelligence-cross-country-evidence-business-characteristics.

Agresti, S., F. Calvino, C. Criscuolo, F. Manaresi, R. Verlhac (2022). "Tracking business dynamism during the COVID-19 pandemic: New cross-country evidence and visualisation tool", VoxEu column available at https://voxeu.org/article/tracking-business-dynamism-during-covid-19-pandemic

Calvino, F., S. DeSantis, I. Desnoyers-James, S. Formai, I. Goretti, F. Manaresi, S. Lombardi, G. Perani. (2022). "La digitalizzazione delle imprese passa dal capitale umano", LaVoce column available at https://lavoce.info/archives/94488/la-digitalizzazione-delle-imprese-passa-dal-capitale-umano/.

Calvino, F., C. Criscuolo and R. Verlhac (2020). "Start-ups in the time of COVID-19: Facing the challenges, seizing the opportunities ", VoxEu column available at https://voxeu.org/article/challenges-and-opportunities-start-ups-time-covid-19.

Contributions to Policy Notes & Reports

Contributor to several OECD reports, flagship publications or policy notes, including (selection):

○ OECD (2023). *OECD Skills Outlook 2023: Skills for a Resilient Green and Digital Transition*, OECD Publishing, Paris, DOI: 10.1787/27452f29-en (contributor to chapter 8, "The human behind the machine: Skills and attitudes towards the future of artificial intelligence").

○ OECD (2021). *Strengthening Economic Resilience Following the COVID-19 Crisis: A Firm and Industry Perspective*, OECD Publishing, Paris, DOI: 10.1787/2a7081d8-en.

○ OECD (2021). "Business dynamism during the COVID-19 pandemic: Which policies for an inclusive recovery?", OECD Policy Responses to Coronavirus (COVID-19), OECD Publishing, Paris, DOI: 10.1787/f08af011-en.

○ OECD (2021). "Declining business dynamism: Cross-country evidence, possible drivers and the role of policy", Directorate for Science, Technology and Innovation Policy Note, OECD, Paris, https://www.oecd.org/sti/ind/declining-business-dynamism.pdf.

○ OECD (2020). "Start-ups in the time of COVID-19: Facing the challenges, seizing the opportunities", OECD Policy Responses to Coronavirus (COVID-19), OECD Publishing, Paris, DOI: 10.1787/87219267-en.

○ OECD (2019). *In-Depth Productivity Review of Belgium*, OECD Publishing, Paris, DOI: 10.1787/88aefcd5-en (contributor to chapter 2, "The firm dimension of productivity").

○ OECD (2018). *Strengthening SMEs and Entrepreneurship for Productivity and Inclusive Growth*, OECD Publishing, Paris. DOI: 10.1787/c19b6f97-en (contributor to chapter 2, "Enabling SMEs to scale up").

○ OECD (2017). "Measuring regional business employment dynamics from micro-aggregation of administrative data" in *The Geography of Firm Dynamics: Measuring Business Demography for Regional Development*, OECD Publishing, Paris. DOI: 10.1787/9789264286764-7-en (full chapter co-authored with Chiara Criscuolo).

○ OECD (2017). *Key issues for digital transformation in the G20, Report prepared for a joint G20 German Presidency*, https://www.oecd.org/g20/key-issues-for-digital-transformation-in-the-g20.pdf (contributor to chapter 8, "Digitalization, SMEs, start-ups and dynamism").

○ OECD (2016). "No Country for Young Firms?", Policy Note, Directorate for Science, Technology and Innovation Policy Note, June 2016, https://www.oecd.org/sti/ind/Policy-Note-No-Country-For-Young-Firms.pdf

Academic qualifications & Fellowships

July 2024 **NBER Robert Summers fellowship**, United States
Fellowship to attend the CRIW meeting at the NBER Summer Institute

February 2018 **Ministry of Education, Research and Innovation**, France
Maître de Conférence National Qualification

Referee Activity

Journal of Economics and Management Strategy, Research Policy, Industrial and Corporate Change, Economics Letters, Journal of Evolutionary Economics, Structural Change and Economic Dynamics, Industry and Innovation, Journal of Industrial and Business Economics, Rivista di Statistica Ufficiale/Review of Official Statistics.

EU-funded Research Projects

AEGIS (Research assistant); ISIGrowth (Contributor); MAPProdigi (Project team member, 2018-2021); MAPProdiGIS (Project team member, 2022-present).

Presentations & Talks

2024
European Association for Research in Industrial Economics – UvA – Amsterdam, The Netherlands
OECD Working Party on Industry Analysis – OECD – Paris, France
BCCP Conference and Policy Forum 2024 – DIW – Berlin, Germany
Advanced course on Innovation, Growth and International Production – La Sapienza – Rome, Italy
Symposium on Dynamics of Generative AI – Weizenbaum Institute – Berlin, Germany
Committee on Industry, Innovation and Entrepreneurship – OECD – Paris, France
IMF Research Department Seminar – International Monetary Fund (Virtual presentation)
FutureTech's Lab meeting – MIT – Cambridge, USA

2023
Les Transformations Technologiques et l'IA au Travail – CNAM – Paris, France (discussant)
Workshop on AI, digital technologies and economic outcomes – OECD – Paris, France (co-organiser)
Complexity Lab in Economics seminar – Università Cattolica del Sacro Cuore – Milan, Italy
EIRMA CTO Forum – Istanbul, Türkiye (Virtual participation)
Pillars Workshop on Digitization, AI and Labor Outcomes – Université Paris 1 – Paris, France

Economics and Statistics Seminar – University of Siena – Siena, Italy
World Bank - Georgetown U. - KIET Workshop on AI, Big data and Policy – Washington, USA
TPRI Brown Bag Seminar – Boston University (Virtual seminar)
3rd International AI-WIPS conference (Hybrid conference, co-organiser)
OECD Working Party on Industry Analysis – OECD – Paris, France
Committee on Industry, Innovation and Entrepreneurship – OECD – Paris, France

2022   NBER Summer Institute, IT and Digitization – Cambridge, USA
Committee on Industry, Innovation and Entrepreneurship – OECD (Virtual meeting)
The future of production: digitization, global value chains, green transition – Pisa, Italy (Virtual)
OECD Working Party on Industry Analysis – OECD (Virtual meeting)
2nd International AI-WIPS conference (Virtual meeting, co-organiser)

2021   Global Innovation Summit – Graz, Austria (Virtual meeting)
Fueling productivity and business dynamism after COVID-19 – EC and OECD (Virtual meeting)
Committee on Industry, Innovation and Entrepreneurship – OECD (Virtual meeting)
OECD Working Party on Industry Analysis – OECD (Virtual meeting)

2020   Committee on Industry, Innovation and Entrepreneurship – OECD (Virtual meeting)
Innovation and Growth Webinars – European Commission and OECD (Virtual meeting)
Groupe de travail sur L'Emploi dans les Start-up – France Strategie (Virtual meeting)
Guest presentation in Industrial Economics class (MSc) – Catholic University – Milan, Italy (Virtual)
13th Meeting of the Regional Policy Network on SMEs – OECD-Asean (Virtual meeting)
OECD Working Party on Industry Analysis – OECD (Virtual meeting)

2019 1st MapProdIGI workshop (co-organiser) – OECD and European Commission, Brussels, Belgium
LEM Seminar – Scuola Superiore Sant'Anna – Pisa, Italy
OECD Working Party on Industry Analysis – Lisbon, Portugal
EMAEE – SPRU, University of Sussex – Falmer, U.K.
Cournot Seminar – BETA, Université de Strasbourg – Strasbourg, France
Committee on Industry, Innovation and Entrepreneurship – OECD – Paris, France

2018   Innova Measure Expert Workshop – JRC – Ispra, Italy
Working Party on Industry Analysis – OECD – Paris, France
Committee on Industry, Innovation and Entrepreneurship – OECD – Paris, France

2017   Innova Measure Workshop – European Commission, Brussels, Belgium
Working Party on Industry Analysis – OECD, Paris, France
Committee on Industry, Innovation and Entrepreneurship – OECD, Paris, France
BBVA Foundation-Ivie Workshop – Univ. de Valencia, Valencia, Spain
EMAEE – Université de Strasbourg, Strasbourg, France

2016   SPRU 50th Anniversary Conference – University of Sussex, Falmer, U.K.
International Schumpeter Society (Poster session) – Montréal, Canada
Séminaire – Industry Canada, Ottawa, Canada
Int. Conference on the Dynamics of Entrepreneurship – ZEW, Mannheim, Germany
Applied Microeconomics Seminar – Paris School of Economics, Paris, France
Working Party on Industry Analysis – OECD, Paris, France
PhD Student Workshop – Scuola Superiore Sant'Anna, Pisa, Italy

2015   CAED, Comparative Analysis of Enterprise Data – Istanbul, Turkey
Working Party on Industry Analysis – OECD, Paris, France
PhD Student Workshop – Scuola Superiore Sant'Anna, Pisa, Italy

2014   OECD Applied Economics Seminars – OECD, Paris, France

Additional Education

Aug. 2019 – Oct. 2019	**Stanford University on Coursera**, Online course *Machine Learning – Grade 100%*
May 2015 – May 2015	**ZEW & Univeristy of Mannheim**, Marmaris, Turkey *CISS - Competition and Innovation Summer School*
Sept. 2014 – Sept. 2014	**Université de Strasbourg**, Strasbourg, France *Visiting scholar at BETA - Bureau d'Economie Théorique et Appliquée*
Jun. 2014 – Jun. 2014	**Centro Interuniversitario di Econometria**, Bertinoro, Italy *Summer School – Time Series Econometrics*
Aug. 2012 – Aug. 2012	**Utrecht University**, Utrecht, The Netherlands *Summer School – Econometrics*
Jul. 2012 – Jul. 2012	**University of Trento**, Trento, Italy *Transatlantic Intellectual Property Summer Academy – Inter-firm Networks for Innovation*
Feb. 2011 – Feb. 2011	**ISPI (Italian Institute for International Relations Studies)**, Milan, Italy *Winter School – The future of Economic Policy in the EU*
Jul. 2010 – Aug. 2010	**London School of Economics and Political Sciences**, London, UK *Summer School – Debt Markets – Final grade: A-*
Jul. 2009 – Aug. 2009	**Keio University and Korea University**, Tokyo, Japan and Seoul, South Korea *Campus Abroad (organized by Bocconi University) – European Economic Policy*

Languages

Italian	Native speaker	**English**	Fluent (Certificate: IELTS – 7,5)
French	Fluent (Certificate: DFP B2 – Très bien)	**Spanish**	Basic (limited proficiency)

Computer Skills

Statistical software	Stata, R Studio, SAS, gretl.	Other software	Excel, Word, PowerPoint, TeX, Access, git.
Languages	R, VBA, Matlab, bash (basics).	OS	Linux (Ubuntu, Mint), Mac OS, Windows.

I authorise for handling personal information. All references available upon request.