

Curriculum Vitae et Studiorum

Ariel Luis Wirkierman

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Associate Professor of Economics, Department of Law, University of Macerata
Piaggia dell'Università, 2, Macerata, 62100, Italy

Date of birth: 20-April-1982

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Current Positions:

2024 - pres	University of Macerata, Italy Department of Law Associate Professor of Economics (28-Oct-2024 - pres)
2019 - pres	Structural Change and Economic Dynamics (Academic Journal) Associate Editor
2019 - pres	Metroeconomica (Academic Journal) Associate Editor

Italian National Scientific Qualification:

ASN II Fascia, 13/A4 - Economia Applicata (from 16/10/2023 to 16/10/2034);

ASN II Fascia, 13/A2 - Politica Economica (from 01/12/2023 to 01/12/2034).

Education:

2019 - 2021	Goldsmiths, University of London, UK Postgraduate Certificate in Learning and Teaching in Higher Education
2008 - 2012	Catholic University of the Sacred Heart, Milan, Italy Dottore di Ricerca in Economia (PhD in Economics) [PhD Thesis]: <i>Productivity Analysis from a Classical perspective: Theory of Measurement and Measurement of Theory</i> (distinction and cum laude) <i>Examination Committee:</i> E. Dietzenbacher, G. Rampa, V. Cerasi (Prize awarded by the Italian Economic Association (SIE), as one of the five most distinguished PhD Thesis in Economics in Italy for the year 2012)
2007 - 2010	National University of La Plata, Argentina Magíster en Economía (Master of Science in Economics); Result: 9.5/10
2001 - 2006	University of Buenos Aires, Argentina Lic. en Economía (Licentiate in Economics); Result: 9.3/10, <i>magna cum laude</i>
1995 - 2000	ORT Technical Institute, Argentina Técnico en Computación (Computer Science Technician); Result: 9.13/10

Previous Professional Appointments and Research Stays:

2017 - 2024	Goldsmiths, University of London, UK Institute of Management Studies (IMS) Senior Lecturer in Economics (01-Sep-2023 - pres), Lecturer B in Economics (01-Sep-2021 to 31-Aug-2023), Lecturer A in Economics (01-Sep-2017 to 31-Aug-2021)
2017 - 2024	University of Sussex, UK Associate Research Faculty, Science Policy Research Unit (SPRU)

2016 - 2017	<p>University of Sussex, UK <i>Research Fellow</i>, Science Policy Research Unit (SPRU) Full time Research Fellow for the EU Horizon 2020 project ISIGrowth (Innovation-fuelled, Sustainable, Inclusive Growth in Europe)</p>
2013 - 2015	<p>Catholic University of the Sacred Heart, Milan, Italy <i>Post-Doc Researcher</i>, Department of Mathematical Sciences, Mathematical Finance and Econometrics</p>
2012, Feb-Oct	<p>University of Pavia, Italy <i>Researcher</i>, International Center of Cooperation for Development (CICOPS)</p>
2010, Jan-Apr	<p>Max Planck Institute of Economics, Jena, Germany <i>Visiting Research Student</i>, Evolutionary Economics Group</p>
2006 - 2008	<p>Ministry of Economy and Production, Argentina <i>Economic Officer</i>, National Office of Regional Economic Programming (DNPER), Secretariat for Economic Policy (Analysis of regional and national inter-industry productive structures)</p>
2005 - 2006	<p>University of Buenos Aires, Argentina <i>Research Assistant</i>, Center of Studies of the Situation and Prospects for Argentina (CESPA), Faculty of Economic Sciences</p>

Research Output:

Publications in peer-reviewed international academic journals:

Wirkierman, A. L., Ciarli, T., and Savona, M. (2024). Employment imbalances in EU regions: technological dependence or high-tech trade centrality? *Regional Studies*, DOI: <https://doi.org/10.1080/00343404.2024.2392794> [url];

Wirkierman, A. L. (2024). Conceptualising productivity measurement from a classical perspective. *PSL Quarterly Review*, 77(309):145–172 [url];

Wirkierman, A. L. (2023). Distributive Profiles Associated with Domestic versus International Specialization in Global Value Chains. *International Journal of Political Economy*, 52(2):117–152 [url];

Wirkierman, A. L. (2023). Structural economic dynamics in actual industrial economies. *Structural Change and Economic Dynamics*, 64(March):245–262 [url];

Wirkierman, A. L., Ciarli, T., and Savona, M. (2023). A taxonomy of European innovation clubs. *Economia Politica: Journal of Analytical and Institutional Economics*, 40:1–34 [url];

Garbellini, N. and Wirkierman, A. L. (2023). The Solow–Pasinetti debate on productivity measurement: Review and reformulation. *Structural Change and Economic Dynamics*, 65(June):438–447 [url];

Bontadini, F., Meliciani, V., Savona, M., and Wirkierman, A. L. (2022). Nearshoring and Farsharing in Europe within the Global Economy. *EconPol Forum*, 23(5):37–42 [url];

Wirkierman, A. L., Bianchi, M., and Torriero, A. (2022). Leontief Meets Markov: Sectoral Vulnerabilities Through Circular Connectivity. *Networks and Spatial Economics*, 22(3):659–690 [url];

Wirkierman, A. L. (2022). Productivity homogenisation trends of six advanced industrial economies: A vertically hyper-integrated approach. *Structural Change and Economic Dynamics*, 61:495–511 [url];

Bianchi, M., Palacios, J. L., Torriero, A., and Wirkierman, A. L. (2019). Kirchhoffian indices for weighted digraphs. *Discrete Applied Mathematics*, 255:142–154 [[url](#)];

Garbellini, N. and Wirkierman, A. L. (2014). Productivity Accounting in Vertically (Hyper-) integrated Terms: Bridging the Gap between Theory and Empirics. *Metroeconomica*, 65(1):154–190 [[url](#)];

Garbellini, N. and Wirkierman, A. L. (2014). Pasinetti’s ‘Structural Change and Economic Growth’: A Conceptual Excursus. *Review of Political Economy*, 26(2):234–257 (paper obtained the *Young Scholars Award*, by the Italian Association for the History of Political Economy (STOREP)) [[url](#)];

Garbellini, N. and Wirkierman, A. L. (2014). Piketty Versus Pasinetti: A Comment on Taylor. *International Journal of Political Economy*, 43(3):35–43 [[url](#)];

Garbellini, N. and Wirkierman, A. L. (2014). Blocks and circularity in labour requirements: An interplay between Clusters and Subsystems in the EU. *Structural Change and Economic Dynamics*, 28:60–74 [[url](#)];

Garbellini, N., Marelli, E., and Wirkierman, A. L. (2014). Domestic demand and global production in the Eurozone: A multi-regional input-output assessment of the global crisis. *International Review of Applied Economics*, 28(3):336–364 [[url](#)].

Book chapters:

Pasinetti, L. L. and Wirkierman, A. L. (2023). Cambridge equation. In Rochon, L.-P. and Rossi, S., editors, *Elgar Encyclopedia of Post-Keynesian Economics*. Edward Elgar, Cheltenham [[url](#)];

Wirkierman, A. L. (2022). Structural dynamics in the era of smart technologies. In Kurz, H. D., Schütz, M., Strohmaier, R., and Zilian, S., editors, *The Routledge Handbook of Smart Technologies: An Economic and Social Perspective*. Routledge, London [[url](#)];

Wirkierman, A. L. (2022). Disequilibrium and instability as the normal state of the industrial economies: A methodological standpoint on structural economic dynamics. In Bellino, E. and Nerozzi, S., editors, *Pasinetti and the Classical Keynesians*. Cambridge University Press, Cambridge [[url](#)];

Bellino, E. and Wirkierman, A. L. (2011). Surplus Approach to Value and Distribution and Structural Economic Dynamics: Interpretation and Uses of Sraffa’s Analysis. In Salvadori, N. and Gehrke, C., editors, *Keynes, Sraffa, and the Criticism of Neoclassical Theory — Essays in Honour of Heinz D. Kurz*. Routledge, London [[url](#)].

Other Research Output:

Wirkierman, A. L., Ciarli, T., and Savona, M. (2022). I club europei dell’innovazione. *Rivista di Politica Economica*, 2022(2):133–163 [[pdf](#)];

Bontadini, F., Meliciani, V., Savona, M., and Wirkierman, A. L. (2022). Nearshoring e Farshoring in Europa nell’economia globale. *Rivista di Politica Economica*, 2022(2):165–179 [[pdf](#)];

Bontadini, F., Meliciani, V., Savona, M., and Wirkierman, A. L. (2022). Nearshoring and Farshoring in Europe: implications for employment. *LuiSS School of European Political Economy, Working Papers Series*, 07/2022 [[url](#)];

Wirkierman, A. L., Ciarli, T., and Savona, M. (2021). A map of the fractal structure of high-tech dynamics across EU regions. *UNU-MERIT Working Papers Series*, 2021-023 [[url](#)];

Wirkierman, A. L., Ciarli, T., and Savona, M. (2021). A taxonomy of European innovation clubs. *UNU-MERIT Working Papers Series*, 2021-020 [url];

Wirkierman, A. L., Ciarli, T., and Savona, M. (2018). Varieties of European National Innovation Systems. *ISIGrowth Working Paper Series*, 13/2018 May [pdf];

Wirkierman, A. L., Ciarli, T., and Mazzucato, M. (2018). Innovation eco-systems and the Risk-Reward Nexus: an evolutionary account. *ISIGrowth Working Paper Series*, 31/2018 June [pdf];

Wirkierman, A. L., Ciarli, T., and Mazzucato, M. (2018). An evolutionary agent-based model of innovation and the risk-reward nexus. *ISIGrowth Working Paper Series*, 19/2018 May [pdf];

Amar, A., Torchinsky Landau, M., and Wirkierman, A. L. (2016). Descomposición alternativa de los componentes de la demanda agregada: Hacia un análisis del corto plazo con más contenido estructural (in Spanish). *UN Economic Commission for Latin American and the Caribbean (ECLAC), Office in Buenos Aires*, LC/L.4205 [url];

Cerdeiro, D. and Wirkierman, A. L. (2008). International Trade Transmission Channel of a Local Crisis: A Simple Model. *Económica*, LIV(1-2):87–119 (paper awarded the *Annual Young Researchers' Prize* by the Argentinian Association of Political Economy (AAEP)).

Teaching Activities:

2025 - pres	<p>University of Macerata, Italy Module: <i>Economics</i> (2024/25 - pres) Convenor/Leader; Undergraduate; 9 CFU (9 ECTS); In person, on campus</p> <p>Module: <i>Fondamenti e metodi per l'analisi empirica nelle scienze sociali</i> (2024/25 - pres) Convenor/Leader; Undergraduate; 5 CFU (5 ECTS); In person, on campus</p>
2017 - 2024	<p>Goldsmiths, University of London, UK Module: <i>International Economics</i> (2018/19 - 2024/25) Convenor/Leader; Undergraduate; 15 UK credits (7.5 ECTS); In person, on campus</p> <p>Module: <i>Quantitative Economics</i> (2017/18 - 2024/25) Convenor/Leader; Undergraduate; 15 UK credits (7.5 ECTS); In person, on campus</p> <p>Module: <i>Social Media and Network Science</i> (2022/23) Lecturer; Graduate; 15 UK credits (7.5 ECTS); Online delivery</p> <p>Module: <i>Applied Quantitative Economics</i> (2017/18 - 2018/19) Convenor/Leader; Graduate; 15 UK credits (7.5 ECTS); In person, on campus</p>
Spring 2017	<p>University of Sussex, UK Module: <i>Applied Economics Topics: Macroeconomics of Innovation</i> Associate Lecturer; Undergraduate; 15 UK credits (7.5 ECTS); In person, on campus</p>
2015 - 2018	<p>UN Economic Commission for Latin America and the Caribbean (UN-ECLAC) Module: <i>Analysis of Global Value Chains through Input-Output techniques</i> (2018) Convenor/Leader; Public Officials; 23 hrs.; In person, on campus</p> <p>Module: <i>Structural analysis of production through Input-Output techniques</i> (2015-2017) Convenor/Leader; Public Officials; 16/20 hrs.; In person, on campus</p>
2014 - 2015	<p>Catholic University of the Sacred Heart, Italy Module: <i>General Mathematics for Economics</i>, Prof. Enrico Miglierina Teaching Assistant; Undergraduate; 9 ECTS; In person, on campus</p>

2004 - 2008	<p>University of Buenos Aires, Argentina Module: <i>Advanced Macroeconomics</i>, Prof. Daniel Heymann (2006-2008) Teaching Assistant; Undergraduate; 96 hrs.; In person, on campus</p> <p>Module: <i>Microeconomics for Economists</i>, Prof. Francisco Mondolfo (2004-2008) Teaching Assistant; Undergraduate; 96 hrs.; In person, on campus</p>
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Externally-funded research projects, consultancies, scholarships and prizes:

2021-2025	<p>Ministry of Foreign Affairs and International Cooperation (MAECI), Italy <i>Researcher</i>, Grant by the Unit for Analysis, Planning, Statistics and Historical Documentation, Directorate General for Public and Cultural Diplomacy</p>
2024-2025	Project: ‘Nearshoring and reshoring in emerging markets: comparative analysis of Asia, Latin America and Africa’
2022-2023	Project: ‘Nearshoring, Global Value Chain (GVC) structure and volatility: opportunities for Italy of a greater integration with Africa’
2021-2022	Project: ‘Nearshoring and regionalisation of Global Value Chains (GVCs): Implications for labour markets in Europe’
2024, Nov-Dec	<p>LUISS Institute for European Analysis and Policy (LEAP), Italy <i>Principal Investigator</i>, ‘Jo Cox’ Fellowship, Jean Monnet Centre of Excellence on “EU Inclusive Open Strategic Autonomy”, co-funded by the European Commission. Research Project: ‘National competitiveness with international productivity: technology and cost determinants of economic performance across Global Value Chains’</p>
2023-2024	<p>Institute for New Economic Thinking (INET) <i>Principal Investigator</i>, Grant No. INO2300012 ‘Productivity, competitiveness and strategic trade in an era of reconfiguration of Global Value Chains’</p>
2022, Jan-Feb	<p>United Nations Conference on Trade and Development (UNCTAD) <i>External Collaborator</i>, Globalisation and Development Strategies Division</p> <p>Background Paper for Trade and Development Report (TDR): Distributive profiles associated with domestic <i>vis-à-vis</i> international specialisation in Global Value Chains (GVCs)</p>
2021, Aug-Nov	<p>United Nations Economic Commission for Latin America and the Caribbean (UN-ECLAC) <i>External Collaborator</i>, International Trade and Integration Division</p> <p>Building of Input-Output matrices for Argentina and Brazil to perform impact analysis on production and employment of changes in electro-mobility</p>
2017-2019	<p>United Nations Economic Commission for Latin America and the Caribbean (UN-ECLAC) <i>External Collaborator</i>, Regional Office in Buenos Aires</p>
2019, May-Jun 2017, Jun-Ago	Updating of inter-country Input-Output tables in Central and South America Project: Input-Output tables for industrial and trade policies in Central and South America (UN Development Account Project 1617AA)
2015, Sep-Nov	<p>United Nations International Labour Office (ILO) <i>External Collaborator</i>, Research Department</p>

	Assessment of economy-wide impacts on production, income and employment of industries leading productivity growth
2014-2015	United Nations Economic Commission for Latin America and the Caribbean (UN-ECLAC) <i>External Collaborator</i> , Regional Office in Buenos Aires
2015, Jul-Oct	Project: Structural configuration of the Argentinean economy through Input-Output techniques <i>External Collaborator</i> , Production, Productivity and Management Division
2015, Apr-May	Project: Analysing the changing productive matrix of Ecuador
2014, Feb-May	Project: Input-Output indicators to assist the formulation of industrial policies in Ecuador
2014, Jan-Dec	Institute for New Economic Thinking (INET) <i>Co-Primary Investigator</i> , Grant No. INO1400003 ‘The Value of Political Connections in Fascist Italy — Stock Market Returns and Corporate Networks’
2012, Sep	Società Italiana di Economia (SIE) Prize awarded (‘menzione’) as one of the five most distinguished PhD Thesis in Economics in Italy in 2012
2008 - 2011	Catholic University of the Sacred Heart, Milan, Italy Full scholarship to attend the Doctoral Programme in Economics and cover living expenses

Doctoral dissertation (PhD) external examiner:

2023	Sant’Anna School of Advanced Studies, Pisa, Italy; Candidate: Lorenzo Cresti; <i>Thesis</i> : International division of labour, knowledge flows and productive capabilities: an Input-Output analysis
2023	University of Macerata, Italy; Candidate: Gianmarco Oro; <i>Thesis</i> : Value, prices and distribution: Computable methods for the investigation of long-period economic structures
2021	Roma Tre University, Italy; Candidate: Giacomo Cucignatto; <i>Thesis</i> : An Input-Output analysis of the ‘Job Guarantee’ and of the National Strategy for Hydrogen in the Italian economy
2020	University of Buenos Aires, Argentina; Candidate: Gabriel Brondino; <i>Thesis</i> : International trade and productive specialisation in Latin America in the era of Global Value Chains
2015	University of Girona, Spain; Candidate: Ferran Portella Carbo; <i>Thesis</i> : Mass unemployment in Spain (1959-2014): Productive and Commercial Problems of a Peripheral Economy in Global Capitalism

Invited Conference and Seminar Presentations (selected, recent years):

2024	<i>Productivity and competitiveness in an era of reconfiguration of Global Value Chains</i> at: 30th. International Input-Output Association (IIOA) Conference, Jul-2024, Santiago de Chile (Chile)
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- Leontief Meets Markov: Sectoral Vulnerabilities and Policy Implications* **at:** International Workshop “Complexity in socio-economic systems: the connectivity approach”, Accademia delle Scienze dell’Istituto di Bologna, Jun-2024, Bologna (Italy)
- Measuring globalisation and global value chains (GVCs) with Input-Output techniques* **at:** PhD Summer School on European Industrial, Innovation and Trade Policy in the Era of Strategic Autonomy, LUISS Institute for European Analysis and Policy (LEAP), Jun-2024, Rome (Italy)
- Normative Prices and Quantities in an Expanding Economy* **at:** International Conference in Honour of Luigi Pasinetti, Accademia Nazionale dei Lincei, May-2024, Rome (Italy); Giornata di Studi ‘Ripensare l’economia con Luigi Lodovico Pasinetti’, Università Cattolica del Sacro Cuore, Jan-2024, Milano (Italy)
- 2023 *Normative Prices and Quantities in an Expanding Economy* **at:** Workshop ‘The Revival of Political Economy’, National and Kapodistrian University of Athens, Oct-2023, Athens (Greece)
- Global labour requirements in the world economy: a GVC decomposition approach* (with Garbellini, Nadia and Giammetti, Raffaele) **at:** 29th. International Input-Output Association (IIOA) Conference, Jun-2023, Alghero (Italy)
- Prices and Quantities in an Expanding Economy: A Pasinettian Journey* **at:** Workshop ‘Value, production and structural change. A workshop in memory of Luigi Pasinetti’, Goldsmiths, University of London, London (UK)
- 2022 *Technological Divides: Robots, Data and Intellectual Property* **at:** 5th UNC-TAD/YSI Summer School, Aug-2022, Online
- Resilient and sustainable GVCs in a post-pandemic world* **at:** Workshop ‘An in-depth look at the GVC Development Report 2021’, United Nations Economic Commission for Latin America and the Caribbean (ECLAC) and Asian Development Bank (ADB), Jun-2022, Online
- Nearshoring and Farshoring in Europe within the Global Economy* (with Bontadini, Filippo; Meliciani, Valentina and Savona, Maria) **at:** Workshop ‘Nearshoring and the Future of Global Value Chains’, School of European Political Economy (SEP), Libera Università Internazionale degli Studi Sociali Guido Carli (LUISS), Jun-2022, Rome (Italy)
- 2021 *Structural dynamics in the era of smart technologies* **at:** Workshop ‘How Smart Machines Will Revolutionize the World’, Graz Schumpeter Centre, University of Graz, Jun-2021, Online
- 2020 *New Conflicts and Inequalities on XXI Century: Technology Effects* **at:** Webinar Series “Can we Combine Innovation with Sustainable Development?”, Institute for New Economic Thinking (INET) YSI Inequality and Economics of Innovation working groups, Online
- 2019 *Of Yeast and Mushrooms: A comparison between TFP growth and hyper-integrated labour productivity changes* **at:** 27th. International Input-Output Association (IIOA) Conference, Jun-2019, University of Strathclyde, Glasgow (UK)

Research Interests:

(with JEL Classification, if applicable)

Input-Output Analysis and National Accounts	(JEL E01, D57, C67, R15)
Global Value Chains	(JEL F4)
Innovation and Industrial Policy	(JEL O25, O32)
Productivity and Technical Change	(JEL D24, O14, O41)
Structural Economic Dynamics and Classical Political Economy	(JEL B51, E11, E12, O41)
Complex Networks	

Academic Affiliations and Certificates:

2020 - pres	Associate Fellow, Advance HE (formerly Higher Education Academy)
2020, Sep	Certificate of Studies in Input-Output Analysis, Ninth International School of Input-Output Analysis, Glasgow (UK). Track: <i>Economic Performance</i> , Lecturer: Prof. Thijs ten Raa
2011 - 2013	Member, Research Group PRIN 2009, <i>Structural Change and Growth</i> , Ministry of Instruction, University and Research (MIUR), Italy
2012, Jun	Certificate of Studies in Input-Output Analysis, Second International School of Input-Output Analysis, Bratislava (Slovakia). Track: <i>Historical Roots and Theoretical Background of Input-Output Analysis</i> , Lecturers: Prof. Heinz Kurz and Prof. Christian Lager
2009 - 2011	Member, Research Group PRIN 2007, <i>Heterogeneous Sectors, Growth and Technical Progress</i> , Ministry of Instruction, University and Research (MIUR), Italy
2008 - pres	Member, International Input-Output Association (IIOA)

Language and Computing Skills:

Languages

Spanish	Native
English	Fluent (IELTS: Grade 8.5/9, CEFR Level C2)
Italian	Fluent
Potuguese	Good working knowledge (CELPE-Bras, “Certificado Intermediário Superior”)

Computing

L^AT_EX, R, Python, STATA, SQLite RDBMS, Linux OS

Trattamento dei dati personali: il sottoscritto acconsente, ai sensi del D.lgs. 30/06/2003, n. 196, al trattamento dei propri dati personali.

Macerata, novembre 2024

Ariel Luis Wirkierman