

**Matteo Richiardi – Scientific Curriculum – September 2022**

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**Research fields:** Labour economics, Social Policy, Health economics, Computational economics.

**Qualifications:** Ph.D. in Economics, University of Torino (2004), M.Sc. in Economics (with distinction), UCL (2000). B.Sc. in Economics (with distinction), University of Torino (1998).

**Current positions**

- Professor of Economics, Institute for Social and Economic Research, University of Essex (since 2018)
- Director, Centre for Microsimulation and Policy Analysis, University of Essex (since 2020)
- Honorary Adjunct Professor, NUI Galway (since 2020)
- Editor in Chief, *International Journal of Microsimulation* (since 2015)
- Affiliate, Institute for New Economic Thinking, Oxford (since 2018)
- Associate Member, Nuffield College (since 2014)
- Board member, International Microsimulation Association (since 2015)

**Past positions**

2018 - 2020	EUROMOD Director, University of Essex
2010 - 2020	Affiliate, Collegio Carlo Alberto, Torino.
2016 - 2018	Senior Research Officer, Department of Social policy and Intervention, University of Oxford.
2014 - 2016	Marie Curie Fellow, Mathematical Institute, University of Oxford.
2010 - 2014	Assistant Professor (from 2012: qualified to Full Professor), University of Torino, Department of Economics and Statistics.
2006 - 2009	Assistant Professor, Università Politecnica delle Marche, Department of Economics.
2004 - 2006	Lecturer in Computational Economics, University of Torino.
2004 - 2006	Fellow of the Lagrange Interdisciplinary Laboratory for Excellence in Complexity, ISI Foundation, Torino.
2004 - 2006	Member of the National Council, Amici della Terra Italia, country representative of Friends of the Earth International, an environmental group.
2003 - 2006	Vicepresident, Associazione Amici della Terra Club Scienza e Professioni, affiliated to Friends of the Earth Italy.
2001 - 2003	Lecturer in Economics of the European Union, Polytechnic of Torino.
1996 - 2003	Partner and Senior Economist at STEP s.a.s. – studi di economia applicata, an economic consultancy (Torino, Italy).

**Selected Grants**

2023 - 2027	Essex PI, "Sustainable Welfare: Rethinking the roles of Family, Market and State (SUSTAINWELL)" EC Horizon Europe, £317,855. <sup>(*)</sup>
2023 - 2025	Essex PI, "Geographical modelling of the Health Effects of Universal Credit", NIHR, £113,643. <sup>(*)</sup>
2022 - 2025	Co-I, "Long-Term Modelling Tools for Adolescent Mental Health and Wellbeing Research", MRC, £133,524. <sup>(*)</sup>
2022 - 2023	Essex PI, "Study on 'Poverty and Income Inequality in the Context of the Digital Transformation'", DG-EMPL, £181,198. <sup>(*)</sup>
2021 - 2022	PI, "Chronic pain, mental health and employment: The role of firms, workers and the state", Population Health Agent-based Simulation nEtnetwork (PHASE), £24,999.
2021 - 2022	PI, "Research collaboration and partnership between Italian Institute for the Evaluation of Public Policies (INAPP) and ISER", INAPP, £165,668.
2021 - 2026	Essex PI, "Evaluation of the health impacts of Universal Credit: A mixed methods study", NIHR, £162,701. <sup>(*)</sup>

2021 - 2025	Essex PI, "Health Equity of Economic Determinants (HEED): A Pan-European Microsimulation model for Health impacts of Income and Social Security Policies", ERC Starting Grant (PI: Prof Vittal Katikireddi, Glasgow), £96,174. <sup>(*)</sup>
2021 - 2024	Essex PI, "Caring Over the Lifecycle: the Roles of Families and Welfare States Today and Into the Future", ESRC - JPI More Years Better Lives, Equality and Wellbeing across Generations, £311,743. <sup>(*)</sup>
2021 - 2022	Essex PI, "Understanding the impacts of income and welfare policy responses to COVID-19 on inequalities in mental health: A microsimulation model", Health Foundation, £55,942. <sup>(*)</sup>
2020 - 2021	Essex PI, "Analysis of the distributional effects of Covid-19 and state-led remedial measures in developing countries", UNU-Wider, £153,771. <sup>(*)</sup>
2020 - 2021	PI, "Research into Covid-19 and financial hardship in London", Greater London Authority, £22,604.
2019 - 2021	Principal Investigator, "Investigating Economic Insecurity: A Microsimulation approach", INAPP, £310,000.
2018 - 2021	PI (from 2021), "Opening the Black Box: towards a transparent and widely-used tax-benefit model for the UK (UKMOD)", Nuffield Foundation, £303,165.
2020	PI, "EUROMOD Update", European Commission, E.1,094,966.
2020	COVID-19: Distributional and budgetary consequences in the UK, INET Oxford, £15,000.
2017 - 2021	Essex PI, "InGRID-2", European Commission H2020, E.903,176.
2019 - 2020	PI, "EUROMOD Update", European Commission, E.1,542,000.
2018 - 2019	Principal Investigator, "EUROMOD Update", European Commission, E.1,850,000.
2017	Co-PI, "Labour market participation in a comparative perspective. UK vs. US 1996-2017", Arrowgrass Capital Management Ltd, £120,000.
2016 - 2017	PI, "A dynamic microsimulation model for ex-ante policy evaluation", Italian National Institute for the Analysis of Public Policies (INAPP), E.65,000.
2015 - 2017	Co-PI, "Skill Mismatch", University of Torino, E.100,000.
2015	PI, "The gender employment gap: Challenges and solutions. Lot 3: Anticipating the future trend of female labour market participation and its impact on economic growth", Eurofound, E.40,050.
2014 - 2016	PI, Marie Curie Intra-European Fellowship. Budget: E.309,000.

<sup>(\*)</sup> Directly managed budget only.

PI – Principal Investigator; Essex PI – Coordinator of University of Essex unit; Co-I – Co-Investigator

### Advisory activity

2014 World Bank consultant on labor market policies, Liberia, West Africa.

**Research highlights:** Author of more than 35 journal papers, 5 books, 10 chapters; h-index = 12 (Publish or Perish, source Cross-ref).

### 10 Selected publications

#### i. Articles

1. Rasella D, Richiardi M et al. (2021). Developing an Integrated Microsimulation Model for the Impact of Fiscal Policies on Child Health in Europe: The Example of Childhood Obesity in Italy. **BMC Med** 19, 310.
2. Pizzi C, Richiardi M et al. (2020). Measuring Child Socio-Economic Position in Birth Cohort Research: The Development of a Novel Standardized Household Income Indicator. **Int. J. of Environmental Research and Public Health**, 17( 5): 1700.
3. Nolan B, Richiardi M, Valenzuela L (2019). The Drivers of Income Inequality in Rich Countries. **Journal of Economic Surveys**, 33(4): 1285-1324.
4. Berton F, Mocetti S, Presbitero A, Richiardi M (2018). Banks, firms, and jobs. **Review of Financial Studies**, 31(6): 2113-2156.
5. Grazzini J, Richiardi M, Tsionas M (2017). Bayesian Estimation of Agent-Based Models. **Journal of Economic Dynamics and Control**, 77:26-47.
6. Grazzini J, Richiardi M (2015). Consistent Estimation of Agent-Based Models by Simulated Minimum Distance. **Journal of Economic Dynamics and Control**, 51: 148-165.

7. Neugart M, Richiardi M (2013). Sequential Teamwork in Competitive Environments: Theory and Evidence from Swimming Data. **European Economic Review**, 63(C): 186-205. Featured in "Take your time. Free-riding in swimming", *The Economist*, Nov. 20, 2014.
8. Contini D, Richiardi M (2012). Reconsidering the effect of welfare stigma on unemployment. **Journal of Economic Behavior and Organization**, 84(1): 229-244.

## ii. Books

9. Richiardi M (2023, forthcoming). Microsimulation for policy evaluation. **Cambridge University Press**, Elements in Public Economics.
10. Berton F, Richiardi M, Sacchi S (2012). *The political economy of work security and flexibility: Italy in comparative perspective*. **Policy Press**, Bristol.

## Supervision of graduate students and postdoctoral fellows

- Currently line managing 5 member of staff, University of Essex. Previously (2018-2020) line-managed other 10 members of staff.
- Currently supervising 3 PhD students: Guohua He, University of Essex 2021-; Nicolo' Framarin, University of Essex 2019-; Melchior Vella, University of Essex 2018-;
- Past Ph.D. supervisions: Jakob Grazzini, University of Torino 2010-2012; Susanna Calimani, University of Torino 2013-2015; Paulina Marra, University of Torino 2014-2017.
- Past M.Sc. supervisions: Hugo Lhullier, Science Po Paris, 2016; Alexander Tromp, University of Oxford, 2017-2018.
- Past Postdocs: Ross Richardson, INET, University of Oxford, 2015-2018.

## Teaching

Since 2014 I have no teaching duties. However, I have given training and advanced training courses in agent based and microsimulation modelling (EUROMOD and UKMOD training courses at the University of Essex, Summer school in Microsimulation Modelling for the Social Sciences at the University of Essex, ad-hoc courses at the University of Oxford, University of Paris-1, Central Bank of Lithuania).<sup>1</sup>

In the past I have taught courses in Statistics, Economic Statistics, Macroeconomics, Computational Economics, Economic Policy and Regional Economic Integration at the University of Turin, Polytechnic University of Marche, and Turin Polytechnic.

## Complete list of publications (J-journals, B-books, C-chapter, R-reports, W-working papers S-submitted)

### i) Social protection, socio-economic and health inequality

1. Katikireddi SV, Kopasker D, Pearce A, Leyland AH, Rostila M, Richiardi MG (2022). Health Equity and Its Economic Determinants (HEED): Protocol for a pan-European microsimulation model for health impacts of income and social security policies. *BMJ Open*, 12(7): 12:e062405.
2. (J) Craig P, Barr B, Baxter AJ, Brown H, Cheetham M, Gibson M, Katikireddi SV, Moffatt S, Morris S, Munford LA, Richiardi M, Sutton M, Taylor-Robinson D, Wickham S, Xiang H, Bamba C (2022). Evaluation of the mental health impacts of Universal Credit: protocol for a mixed methods study. *BMJ Open*, 12(4): 12:e061340.
3. (J) Rasella D, Richiardi L, Brachowicz N, Jara HJ, Hanson M, Boccia D, Richiardi M, Pizzi C (2021). Developing an Integrated Microsimulation Model for the Impact of Fiscal Policies on Child Health in Europe: The Example of Childhood Obesity in Italy. *BMC Med* 19, 310. <https://doi.org/10.1186/s12916-021-02155-6>
4. (W) Richiardi M (2022). A Basic Income for France: Ideas for a debate. *CeMPA Working Paper* 6/22.
5. (W) Richiardi M, Bronka P (2022). LABSim: a dynamic life course model of individual life course trajectories for Italy. *CeMPA Working Paper* 5/22.

<sup>1</sup> See <https://sites.google.com/site/matteorichiardi/teaching> and <https://www.microsimulation.ac.uk/about/training>.

6. (W) Collado D, Popova D, Richiardi M (2021). Covid-19 and financial hardship in London. CeMPA Working Paper 9/21.
7. (S) Lastunen J, Rattenhuber P, Adu-Ababio K, Gasior K, Jara HX, Jouste M, McLennan D, Nichelatti E, Oliveira RC, Pirttilä J, Richiardi M, Wright G (2021). The mitigating role of tax and benefit rescue packages for poverty and inequality in Africa amid the COVID-19 pandemic. WIDER Working Paper 2021/148
8. (J) Rasella D, Richiardi L, Brachowicz N, Jara HJ, Hanson M, Boccia D, Richiardi M, Pizzi C (2021). Developing an Integrated Microsimulation Model for the Impact of Fiscal Policies on Child Health in Europe: The Example of Childhood Obesity in Italy. **BMC Med** 19, 310.
9. (S) Lastunen J, Richiardi M (2021). Forecasting recovery from Covid-19 using financial data: An application to Vietnam. CeMPA Working Paper 4/21.
10. (W) Richiardi M, He Z (2020). Measuring economic insecurity: A review of the literature. CeMPA Working Paper 1/20.
11. (W) Richiardi M, He Z (2020). Measuring economic insecurity: A microsimulation approach. CeMPA Working Paper 2/20.
12. (J) Pizzi C, Richiardi M et al. (2020). Measuring Child Socio-Economic Position in Birth Cohort Research: The Development of a Novel Standardized Household Income Indicator. *Int. J. of Environmental Research and Public Health*, vol. 17, no. 5, pp. 1700-1717.
13. (J) Richiardi M, Nolan B, Kenworthy L (2020). What happened to the 'Great American Jobs Machine'?. *International Journal of Microsimulation*, vol. 13, no. 1, pp. 19-51.
14. (J) Bronka P, Collado D, Richiardi M (2020). The Covid-19 crisis response helps the poor: The distributional and budgetary consequences of the UK lockdown. *Covid Economics* no. 26, pp. 79-106.
15. (J) Nolan B, Richiardi M, Valenzuela L (2019). The Drivers of Income Inequality in Rich Countries. *Journal of Economic Surveys*, vol. 33, no. 4, pp. 1285-1324.
16. (W) Richiardi M, Valenzuela L (2019). Firm Heterogeneity and the Aggregate Labour Share. INET Working Paper No. 2019-08.
17. (J) Richardson R, Pacelli L, Richiardi M (2019). Understanding low female labour force participation: Policy evaluation using microsimulation. *International Journal of Microsimulation*, vol. 12, no. 2, pp. 50-66.
18. (J) Berton F, Mocetti S, Presbitero A, Richiardi M. (2018) Banks, firms, and jobs. *Review of Financial Studies*, vol. 36, no. 1, pp. 2113-2156.
19. (J) Richardson R, Pacelli L, Poggi A, Richiardi M (2018). Female labour force projections using microsimulation for six EU countries. *International Journal of Microsimulation*, vol. 11, no. 2, pp. 5-51.
20. (C) Richiardi M, Richardson R. (2016). Agent-based Computational Demography and Beyond using JAS-mine. In: Grow A, van Bavel J. *Agent-Based Modeling in Population Studies*. Springer Series on Demographic Methods and Population Analysis.
21. (C) Neugart M, Richiardi M (2018). Agent-based models of the labor market. LABORatorio Revelli WP 125/2012. In: Chen S.-H, Kaboudan M, Du Y.-R (eds.). *Handbook on Computational Economics and Finance*, Oxford University Press, Oxford.
22. (C) Berton F, Richiardi M, Sacchi S (2015). Non-standard work, low-paid work and employment dynamics in Italy: evidence from an occupational perspective. In: Eichhorst W, Marx P. (eds). *Non-Standard Employment in Post-Industrial Labour Markets*. Edward Elgar, Cheltenham, UK and Northampton, MA, USA.
23. (J) Presbitero A, Richiardi M, Amighini A (2015). Is labor flexibility a substitute to offshoring? Evidence from Italian manufacturing. *International Economics*, vol. 142, pp. 81-93.
24. (W) Richiardi M (2015). Liberia. Expanding formal employment through labour market reforms. LABORatorio Revelli WP 144/2015.
25. (J) Richiardi M, Poggi A (2014). Imputing Individual Effects in Dynamic Microsimulation Models. An application to household formation and labor market participation in Italy. *International Journal of Microsimulation*, 7(2), pp. 3-39.

26. (B) Berton F, Richiardi M, Sacchi S (2012). *The political economy of work security and flexibility: Italy in comparative perspective*. Policy Press, Bristol.
27. (J) Contini D, Richiardi M (2012). Reconsidering the effect of welfare stigma on unemployment. *Journal of Economic Behavior and Organization*, vol. 84, no. pp. 229-244.
28. (J) Berton F, Richiardi M, Sacchi S (2011). Una misura monetaria della precarietà dei lavoratori italiani. (A monetary measure of the precarity of Italian workers.) *Italian Economic Journal*, vol. XVI, no.1, pp. 149-172.
29. (J) Leombruni R, Richiardi M, Demaria M, Costa G (2010). Aspettative di vita, lavori usuranti e equità del sistema previdenziale. Prime evidenze dal Work Histories Italian Panel. (Life expectancy, hazardous work and fairness of the pension system. Evidence from the WHIP employer-employee linked dataset.) *Epidemiologia e Prevenzione*, vol. 34, no. 4, pp. 150-158
30. (C) Presbitero A, Amighini A, Richiardi M (2010). Delocalizzazione produttiva e mix occupazionale. (Offshoring and occupational mix.) In: Zazzaro A (ed.). *Reti d'impresa e territorio*. Il Mulino, Bologna.
31. (B) Berton F, Richiardi M, Sacchi S (2009). *Flex-insecurity. Perché in Italia la flessibilità diventa precarietà*. (Flex-insecurity: Why in Italy flexibility becomes precarity.) Il Mulino, Studi e Ricerche, Bologna.
32. (J) Berton F, Richiardi M, Sacchi S (2009). Flessibilità del lavoro e precarietà dei lavoratori in Italia: analisi empiriche e proposte di policy. (Labour flexibility and workers' precarity: An empirical analysis and some policy proposals.) *Rivista Italiana di Politiche Pubbliche*, vol. 1, pp. 33-70.
33. (C) Berton F, Richiardi M, Sacchi S (2009). L'indennità di terminazione: una proposta pratica contro la precarietà. (Dismissal allowance: A proposal to fight precarity.) In: Dell'Aringa C, Treu T (eds.). *Le riforme che mancano*. Il Mulino, AREL, Bologna.
34. (J) Richiardi M, Contini D (2008). Active and Passive Policies Against Poverty with Decreasing Employability. *Italian Economic Journal*, vol. XIII, no. 2, pp. 245-272.
35. (J) Leombruni R, Richiardi M (2006). LABORSim: An Agent-Based Microsimulation of Labour Supply. An application to Italy. *Computational Economics*, vol. 27, no. 1, pp. 63-88.
36. (J) Richiardi M (2006). Toward a Non-Equilibrium Unemployment Theory. *Computational Economics*, vol. 27, no. 1, pp. 135-160.
37. (J) Richiardi M (2004). A Search Model of Unemployment and Firm Dynamics. *Advances in Complex Systems*, vol. 7, no. 2, pp. 203-221.
38. (J) Richiardi M (2004). Generalizing Gibrat. Reasonable Stochastic Multiplicative Models of Firm Dynamics. *Journal of Artificial Societies and Social Simulation*, vol. 7, no. 1.
39. (C) Richiardi M, Fazio L (2004). UrbanSim: Microsimulazione urbana a Torino. (UrbanSim: Urban microsimulation for Turin.) In: Russo G, Terna P (eds.). *I numeri per Torino*. Otto Editore, Torino.

## ii) Methodological and econometric work on agent-based and microsimulation models

1. (B) Richiardi M (2023, forthcoming). *Microsimulation for Policy Evaluation*. Cambridge University Press, Elements in Public Economics.
2. (S) van de Ven J, Bronka P, Richiardi M (2022). Dynamic simulation of taxes and welfare benefits by database imputation. CeMPA Working Paper 3/22.
3. (J) Richiardi M, Collado D, Popova D (2021, forthcoming). UKMOD – A new tax-benefit model for the four nations of the UK. *International Journal of Microsimulation*.
4. (J) Richiardi M (2018). The Code and the Model. A response to “The Code is the Model”, by Luzius Meisser. *International Journal of Microsimulation*, vol. 10, no. 3, pp. 204-208.
5. (B) Delli Gatti D, Gallegati M., Fagiolo G, Richiardi M, Russo A (2018). *Agent-based Computational Economics: A Toolkit*. Cambridge University Press.
6. (J) Richiardi M (2017). The future of Agent-Based Modelling. *Eastern Economic Journal*, 43(2): 271–287.
7. (J) Grazzini J, Richiardi M, Tsionas M (2017). Bayesian Estimation of Agent-Based Models. *Journal of Economic Dynamics and Control*, 77:26-47.

8. (J) Richiardi M, Richardson R (2017). JAS-mine: A new platform for microsimulation and agent-based modelling. *International Journal of Microsimulation*, 10(1): 106-134.
9. (J) Grazzini J, Richiardi M (2015). Estimation of Ergodic Agent-Based Models by Simulated Minimum Distance. *Journal of Economic Dynamics and Control*, 51, pp. 148-165.
10. (W) Richardson R, Richiardi M, Wolfson M (2015). We ran one billion agents. Scaling in simulation models. Nuffield College Economic Papers 2015-W05.
11. (C) Richiardi M (2013). The missing link: AB models and dynamic microsimulation. In: Leitner S, Wall, F (eds). *Artificial Economics and Self Organization. Agent-Based Approaches to Economics and Social Systems*. Springer, Lecture Notes in Economics and Mathematical Systems, vol. 669, Berlin.
12. (J) Grazzini J, Richiardi M, Sella L (2013). Indirect estimation of agent-based models. An application to a simple diffusion model. *Complexity economics*, vol. 2, pp. 25-40.
13. (J) Richiardi M (2012). Agent-based Computational Economics. A Short Introduction. *The Knowledge Engineering Review*, vol. 27, no. 2, pp. 137-149.
14. (C) Grazzini J, Richiardi M, Sella L (2012). Small sample bias in MSM estimation of agent-based models. In: Teglio A, Alfarano S, Camacho-Cuena E, Ginés-Vilar M (eds). *Managing Market Complexity. The Approach of Artificial Economics*. Springer, Lecture Notes in Economics and Mathematical Systems, vol. 662, Berlin.
15. (C) Gallegati M, Richiardi M (2009). Agent-based Modelling in Economics and Complexity. In: Meyer B (ed.). *Encyclopedia of Complexity and System Science*, Springer, New York, pp. 200-224.
16. (J) Contini B, Leombruni R, Richiardi M (2007). Exploring a new ExpAce: The Complementarities Between Experimental Economics and Agent-based Computational Economics. *Journal of Social Complexity*, vol. 3, no. 1, pp. 13-22
17. (J) Leombruni R, Richiardi M, Saam NJ, Sonnessa M (2006). A Common Protocol for Agent-Based Social Simulation. *Journal of Artificial Societies and Social Simulations*, vol. 9, n.1.
18. (C) Leombruni R, Richiardi M (2006). Una risposta alle critiche: le metodologie per la definizione dei modelli di simulazione. (The methodology of agent-based models: A response to the critiques.) In: Terna et al. (eds.). *Modelli per la complessità - La simulazione ad agenti in economia*. Il Mulino, Bologna.
19. (J) Richiardi M, Leombruni R (2005). Why Are Economists Sceptical About Agent-Based Simulations? *Physica A*, vol.355, no. 1, pp. 103-109.
20. (B) Leombruni R, Richiardi M (eds.) (2004). *Industry and Labor Dynamics. The Agent-Based Computational Economics Approach*. World Scientific, Singapore.

### iii) Miscellaneous

1. (J) Campaniello N, Richiardi M (2017). The role of museums in bilateral tourist flows: Evidence from Italy. *Oxford Economic Papers*, vol. 70, no. 3, pp. 658-679.
2. (W) Farmer JD, Geanakoplos J, Masoliver J, Montero M, Perello' J, Richiardi M (2017). Discounting the distant future: What do historical bond prices imply about the long term discount rate? LABORatorio Revelli WP 156/2017.
3. (W) Richiardi M (2014). Forecasting with unobserved heterogeneity. LABORatorio Revelli WP 123/2012.
4. (J) Neugart M, Richiardi M (2013). Sequential Teamwork in Competitive Environments: Theory and Evidence from Swimming Data. *European Economic Review*, vol. 63, pp. 186-205.
5. (J) Richiardi M (2009). Should (and Could) We Ban Prescriptions? *The B.E. Journal of Economic Analysis & Policy. Topics*, vol. 9, n.1, art. 1.
6. (J) Gallegati M, Greenwald B, Richiardi M, Stiglitz J (2008). The Asymmetric Effect of Diffusion Processes: Risk Sharing and Contagion. *The Global Economy Journal*, vol. 8, no. 3, art. 2.
7. (J) Richiardi M (2006). Jesus vs. Hillel. From Moral to Social Norms and Back. *European Journal of Economic and Social Systems*, vol. 19, no. 2, pp.171-190

8. (J) Richiardi M (2005). On the Virtues of the Shame Lane. *The B.E. Journal of Economic Analysis & Policy. Topics*, vol. 5, no. 1, Article 1.