SALVATORE TORRISI

CURRICULUM VITAE

CONTACTS

Department of Economics, Management and Statistics University of Milano-Bicocca via Bicocca degli Arcimboldi, 8 20126 Milano, Italy Tel.: +39 02 6448 3146 <u>salvatore.torrisi@unimib.it</u> <u>https://en.unimib.it/salvatore-torrisi</u> Scopus ID: 6603911274 ORCID ID: 0000-0003-4194-5644

POSITIONS

- October 2019- present. Vice-Rector for Research Valorization and Technology Transfer, University of Milano-Bicocca, Italy.
- October 2017-present. Professor of Strategic Management, Department of Economics, Management and Statistics, University of Milano-Bicocca, Italy.
- *December 2017-present*. Management Division Coordinator, Department of Economics, Management and Statistics, University of Milano-Bicocca, Italy.
- 2011-2014. Coordinator, Doctoral Program in General Management, University of Bologna, Italy.
- 2006-2012. Deputy-Dean, Faculty of Economics at Rimini, University of Bologna, Italy.
- 2006-2017. Professor of Management, Department of Management and School of Economics, Management, and Statistics – Rimini Campus, University of Bologna, Italy.
- 2004-2006. Associate Professor of Management, Faculty of Economics at Rimini and Department of Management, University of Bologna, Italy.
- 2000- 2004. Associate Professor of Management, Faculty of Law and Department of Law and Policy Sciences, University of Camerino, Italy.
- 1994- 2000. Assistant Professor of Industrial Economics, Faculty of Economics, Università C. Cattaneo, Castellanza (VA), Italy.

VISITING

- *February July 2016.* Visiting Professor, Department of Innovation and Organizational Economics, Copenhagen Business School, Denmark.
- October-November 2015. Visiting Professor, School of Economics, Wuhan University of Technology, China.
- *February- May 2013.* Visiting Professor, Faculteit Toegepaste Economische Wetenschappen (Faculty of Applied Economics), University of Antwerp, Belgium.
- July-September 1999. Visiting scholar, SPRU, University of Sussex, Brighton, UK.
- July- September 1995. Visiting scholar, Center for Economic Policy Research (CEPR), Dept. of Economics, Stanford University, CA, within a research project on "Innovation and market structure in the computer industry" (coordinator: Timothy Bresnahan, CEPR, Stanford University).

EDUCATION

- July 1995. DPhil in "Science and Technology Policy Studies" from the Science Policy Research Unit (SPRU), University of Sussex, Brighton, UK (thesis approved without requests for revisions in Sept. 1994).
- April 1986. Laurea (MSc) in Economics, Bocconi University, Milan, Italy.
- 1986-1993. Scholarship by "Associazione Amici della Bocconi", Bocconi University, Milan, Italy.

RESEARCH INTERESTS

Economics and management of innovation

Intellectual property strategy

Technology transfer and entrepreneurship

Digital technologies and corporate change

Competitive strategy

PROFESSIONAL SERVICE

Affiliations and Professional Responsibilities

CefES-DEMS (Center for European Studies), University of Milano Bicocca, Italy.

ICRIOS (The Invernizzi Center for Research on Innovation, Organization, Strategy and Entrepreneurship), Bocconi University, Milan, Italy.

Secretary General and Board Member, EPIP European Policy for Intellectual Property Policy Association (2009-2021).

Associations

Academy of Management, European Policy for Intellectual Property Policy Association (EPIP), Società Italiana di Management (SIMA), Società Italiana di Economia e Politica Industriale (SIEPI), EPIP European Policy for Intellectual Property Policy Association.

Editorial Boards

Journal of Industrial and Business Economics/Economia e Politica Industriale (Associate editor)

Ad hoc Reviewer

Economics of Innovation and New Technology, European Management Review, IEEE Transactions on Engineering Management, Industrial and Corporate Change, Information Economics and Policy, Journal of Business Research, Journal of Technology Transfer, Oxford Economic Papers, Research Policy, Scientometrics, Small Business Economics, Strategic Entrepreneurship Journal, Strategic Management Journal, Technovation.

TEACHING

PhD Programs

- 2022. "How Useful is Science? The Societal Impact of Research". Summer School Starting a Grant proposal: from idea to practice, Lake Como School of Advanced Studies, July 18-22.
- 2021-present. Faculty Member (Technology and Innovation Management). PhD Programs in Business for Society and Economics, Statistics and Data Science. University of Milano-Bicocca, Italy.
- 2019. Winter School of Science and Technology Entrepreneurship Promotion, University of Milano-Bicocca, Italy (director).
- 2006-2022. Member of the PhD Board, PhD in Management, University of Bologna, Italy.
- 2006-present. "Economics and Management of Innovation" (core course), PhD in Management, University of Bologna, Italy.
- 2008, 2009, and 2013. Scientific Committee, Summer School in "Economics and Management of Intellectual Property Rights", Alma Graduate School, University of Bologna.
- 2006-2017. "Technology Management and Entrepreneurship", PhD in General Management, University of Bologna, Italy.
- 2002-2005. Industrial Dynamics and Firm Behaviour Empirical Aspects, ETIC, European PhD Programme, MERIT, Maastricht Economic Research Institute on Innovation and Technology, University of Maastricht, The Netherlands.

2001-2005. Economics and Management of Entrepreneurship and ICTs, Doctoral Program in Economics and Management, Sant'Anna School of Advanced Studies, Pisa, Italy.

Graduate Programs

- 2018-2019-present. "Strategic Management", University of Milano-Bicocca, Italy.
- 2017-2018. "Advanced Competitive Management", University of Milano-Bicocca, Italy.
- 2004-2017. "Business Strategy, "Business Plan", "Strategic Management" and "Economics and Management of Innovation", University of Bologna (Rimini Campus), Italy.
- 2015. "Economics and Management of Innovation", School of Economics, Wuhan University of Technology, Wuhan, China.
- 2013. "Organization and Strategy: Innovation", MSc in Applied Economic Sciences, University of Antwerp, Belgium.
- 2008-2010. "Strategic Management of Innovation", Executive Master in Technology and Innovation Management, Alma Graduate School, University of Bologna, Italy.

Undergraduate Programs

- 2018-2019. "Market-Driven Management", University of Milano-Bicocca, Italy.
- 2017-2018. "Corporate Global Communication", University of Milano-Bicocca, Italy.
- 2004-2017. "Economics and Management", University of Bologna (Rimini Campus), Italy.
- 2008-2011. "Economics of Innovation", Faculty of Economics, Bocconi University, Italy.
- 2000- 2006. "Economics and Management", University of Camerino, Italy.
- 1997-2002. "Industrial economics", Cattaneo University, Castellanza (VA), Italy.
- 1987-1998. "Economics of Transnational Corporations", Bocconi University, Milan, Italy.

RESEARCH

Selected projects

- 2022-present (Principal co-investigator). MUSA (Multilayered Urban Sustainability Action), an Innovation Ecosystem funded under Mission 4 Education and Research - Component 2 "From research to business" - Investment 1.5 of the National Recovery and Resilience Plan, part of the Next Generation EU Programme.
- 2018-present (Principal investigator). "Growth and top management team transformation in entrepreneurial ventures", University of Milano-Bicocca.
- 2017-2019. "Opportunities and Challenges of Digital Transformation". Bocconi University and Fondazione Tronchetti Provera, Milano.

- 2012- 2016. (Principal investigator) "Market and Non-Market Mechanisms for the Exchange and Diffusion of Innovation: When Do They Work, When Do They Not Work, and Why Should We Care", University of Bologna research unit, Italian Ministry of University and Research (MIUR) (PRIN 2012).
- 2012-2015. "Financing Knowledge Transfer in Europe", University of Bologna research unit (in collaboration with Bocconi University), 2011-2012 EIBURS Programme, European Investment Bank.
- 2011-2012. "Measurement and analysis of knowledge and R&D exploitation" flows, assessed by patent and licensing data, Bocconi University research unit (in collaboration with K.U. Leuven), EC DG Research.
- 2008-2011. "The changing nature of internationalization of innovation in Europe: impact on firms and the implications for innovation policy in the EU" (GlobInn), Bocconi University research unit (Project coordinator: SPRU- University of Sussex, UK), EC FP7 Cooperation Work Programme.
- 2008-2011. "S&T indicators combining patent data and surveys: empirical models and policy analyses (InnoS&T), Bocconi University research unit, EC FP7 Cooperation Work Programme.
- 2007-2011. Management Committee COST Action IS0604: "Science and Technology Research in a Knowledge-Based Economy" (STRIKE), EC RTD Framework Programme/ESF.
- 2005-2008. (Principal investigator) "Study on the effects of allowing patent claims for computerimplemented inventions", CESPRI - Bocconi University research unit (main contractor: MERIT, University of Maastricht, NL), EC-DG Information Society.
- 2001- 2005. (Principal Investigator) "The Economics and Management of Open Source Software", Laboratory of Economics and Management (LEM), Sant'Anna School of Advanced Studies, Pisa, Italy.
- 2002-2005. "Economic Change: the microfoundations of institutional and organisational change (EconChange)", Sant'Anna School of Advanced Studies Pisa research unit (European coordinator: IET – Universitat Pompeu Fabra, Barcelona), EC, DGXII, FP V.
- 2002-2004. "The Rise and Growth of the Software Industry in Brasil, China, India, Ireland and Israel", Software Industry Center (SWIC), Carnegie Mellon University, Pittsburgh, Alfred P. Sloan Foundation and Commonwealth of Pennsylvania.
- 2000-2002. (Principal investigator) "Information Spillovers, Firm Choices and Technological Diffusion in Italy and Europe. Determinants and Effects", University of Camerino research unit, Italian Ministry of University and Research (MURST).
- 1999-2001. "Silicon Valley and Its Imitators", Stanford Institute for Economic Policy Research (SIEPR), Stanford University.
- 1998-2001. "Technology and Infrastructures Policy in the Knowledge-Based Economy- The Impact of the Tendency towards Codification of Knowledge", CESPRI- Bocconi University (European Coordinator: BETA, Strasbourg), EC DGXII TSR Targeted Socio-Economic Research (TSER) Programme.
- *1998-2000.* (Principal investigator), Cattaneo University research unit, Castellanza, Italy, "Dynamic capabilities, growth and long-term competitiveness of European firms: a diagnosis and the implications for EU policies", EC DG XII TSER Programme.

- *1995-1997.* CESPRI- Bocconi University, "Industry Studies of Innovation Using the Community Innovation Survey Data-Computer and Office Machinery", Eurostat-EC DG XIII-D.
- *1992-1994.* "The international computer software industry", University of California at Berkeley, Alfred P. Sloan Foundation.

Ad hoc Evaluator

VQR 2011-2014, National Agency for the Evaluation of University and Research Institutes (ANVUR) (Coordinator of the Business Research Area); MIUR (Italian Ministry of University and Research); EC FP7, DG RTD, Directorate L: Science, Economy and Society; Programme Vigoni, Deutsch-Italianischen Hochschulzentrum and CRUI; SFI Investigator Programme, Science Foundation Ireland; Programme Vinci, Université Franco-Italienne; TEDIS Programme, EC-DGXIII ("Telecommunications, Information Industries and Innovation".

SELECTED INTERNATIONAL PUBLICATIONS

Articles in refereed journals

Cappelli, R., Corsino, M., Laursen, K., Torrisi, S. (2023). Technological competition and patent strategy: Protecting innovation, preempting rivals and defending the freedom to operate. *Research Policy*, 52(6) [10.1016/j.respol.2023.104785].

Bahoo Torodi, A. and Torrisi, S. (2023). When do Spinouts Benefit from Market Overlap with Parent Firms? *Journal of Business Venturing*, 37 (6), <u>https://doi.org/10.1016/j.jbusvent.2022.106249</u>.

D'Agostino, L.M., Tiraboschi, L. and Torrisi, S. (2023). European patent opposition outcomes in biotechnology, *World Patent Information*, 73, <u>https://doi.org/10.1016/j.wpi.2023.102185</u>.

Corsino, M., Mariani, M. and Torrisi, S. (2019). Firm Strategic Behavior and the Measurement of Knowledge Flows with Patent Citations. *Strategic Management Journal*, 40 (7): 1040-1069, DOI: 10.1002/SMJ.3016.

Corsino, M., Giuri, P. and Torrisi, S. (2019). Technology spin-offs: teamwork, autonomy, and the exploitation of business opportunities. *Journal of Technology Transfer*, 44(5), 1603-1637, DOI: 10.1007/s10961-018-9669-1.

Giachetti, C. and Torrisi, S. (2017). Following or Driving Away from the Leader? A Question of Environmental Uncertainty and Visibility. *European Management Review*, 15(3), pp. 445-463, DOI: 10.1007/s10961-018-9669-1.

Torrisi, S., Gambardella, A., Giuri, P., Harhoff, D., Hoisl, K. and Mariani, M. (2016). Used, blocking and sleeping patents: Empirical evidence from a large-scale inventor survey, *Research Policy*, 45(7): 1374-1385. DOI: 10.1016/j.respol.2016.03.021

Giarratana, M. and Torrisi, S. (2010). Foreign Entry and Survival in a Knowledge-Intensive Market: Emerging Economy Countries' International Linkages. Technology Competences, and Firm Experience. *Strategic Entrepreneurship Journal*, 4: 85-104.

Giuri, P., Ploner, M., Rullani, F. and Torrisi, S. (2010). Skills, division of labor and performance in collective inventions: Evidence from open source software. *International Journal of Industrial Organization*, 28: 54–68.

Laursen, K., Leone, I. and Torrisi, S. (2010). Technological exploration through licensing: New insights from the licensee's point of view. *Industrial and Corporate Change*, 19(3): 871-897.

Gambardella, A., Mariani, M. and Torrisi, S. (2009). How Provincial is your Region? Openness and Regional Performance in Europe. *Regional Studies*, 43(7): 935-947.

Hall, B. H., Thoma, G. and Torrisi, S. (2009). Financial Patenting in Europe. *European Management Review*, 6(1): 45-63.

Giuri, P., Rullani, F. and Torrisi, S. (2008). Explaining Leadership in Virtual Teams: The Case of Open Source Software. *Information Economics and Policy*, 20(4): 305-315.

Giuri, P., Zinovyeva, N. and Torrisi, S. (2008). ICT, Skills and Organisational Change: Evidence from a Panel of Italian Manufacturing Firms. *Industrial and Corporate Change*, 17(1): 29-64.

Grimaldi, R. and Torrisi, S. (2001). Codified-Tacit and General-Specific Knowledge in the Division of Labour among Firms. A Case Study of the Software Industry. *Research Policy*, 30(9): 1425-1442.

Gambardella, A. and Torrisi, S. (1998). Does Technological Convergence Imply Convergence in Markets? Evidence From the Information Technology Industry. *Research Policy*, 27(6): 445-463.

Torrisi, S. (1997). Firms Skills as a Channel to External Knowledge. Theory and Empirical Evidence. *Economia&Lavoro*, XXXI (3-4): 51-69.

Malerba, F. and Torrisi, S. (1992). Internal capabilities and external networks in innovative activities. Evidence from the software industry. *Economics of Innovation and New Technology*, 2: 49-71.

Books and chapters in edited books

Gambardella, A., Giuri, P. and Torrisi, S. (2014). Markets for technology. In Dogson, M. et al. (eds) *Handbook of Innovation Management*. Oxford University Press, Oxford: 229-247.

Torrisi, S. (2014). Software Industry. In Augier, M. and Teece, D. J. (eds) *Palgrave Encyclopedia of Strategic Management*. Palgrave Macmillan (DOI: 10.1057/9781137294678.0640).

Giuri, P., Rullani, F. and Torrisi, S. (2010). A test of Lazear's theory of entrepreneurship in the Open Source Software virtual community. In Audretsch, D.B. et al. (eds) *New Frontiers in Entrepreneurship: Recognizing, Seizing, and Executing Opportunities.* Springer Science, New York: 197-222.

Giuri P., Rullani, F. and Torrisi, S. (2007). Survival and activity of OSS projects. In Bonaccorsi, A. and Rossi, C. (eds) *Economic Perspectives on Open Source Software*. Franco Angeli, Milano: 157-173.

Giarratana, M. and Torrisi, S. (2006). Science-Based Industries and Spin-Offs. In Bianchi, P. and Labory, S. (eds) *International Handbook of Industrial Policy*. Edward Elgar, Chelteham, UK: 265-278.

Giarratana, M., Pagano, A. and Torrisi, S. (2005). The Role of Multinational Companies. In Arora, A. and Gambardella, A. (eds) *From Underdogs to Tigers: The Rise and Growth of the Software Industry in Brazil, China, India, Ireland, and Israel.* Oxford University Press, New York: 207-235.

Granstrand, O. and Torrisi, S. (2004). Technology and Business Diversification: A Survey of Theories and Empirical Evidence. In Cantwell, J. et al. (eds) *The Economics and Management of Technological Diversification*. Routledge, London: 21-68.

Arora, A., Gambardella, A. and Torrisi, S. (2004). In the Foosteps of Silicon Valley? Indian and Irish Software in the International Division of Labour. In Bresnahan. T. and Gambardella, A. (eds) *Building High Tech Clusters: Silicon Valley and Beyond*. Cambridge University Press, Cambridge: 78-120.

Torrisi, S. (2004). High-Tech Clusters in Emerging Regions. A Survey of Theory and Empirical Evidence from the Software Industry, in Zucchella, A. (ed.). *Essays on the Economics and Management of Innovation*, IUSS Press, Istituto Universitario di Studi Superiori di Pavia, Pavia: 84-119.

Giarratana, M. and Torrisi, S. (2002). Competence accumulation and collaborative ventures: Evidence from the largest European electronics firms and implications for the EU technological policies. In Lundan, S. M. (ed.) *Network Knowledge in International Business*. Edward Elgar, Cheltenham, UK: 196-215.

Torrisi, S. (1999). Firm Specialisation and Growth. A Study of the European Software Industry. In Gambardella, A. and Malerba, F. (eds) *The Organisation of Economic Innovation in Europe*. Cambridge University Press, Cambridge: 239-268.

Torrisi, S. (1998). *Industrial Organisation and Innovation*. An International Study of the Software Industry. Edward Elgar, Cheltenham, UK (preface by Keith Pavitt).

Malerba, F. and Torrisi, S. (1996). The Dynamics of Market Structure and Innovation in the Western European Software Industry. In Mowery, D. (ed.) *The International Computer Software Industry*. *A Comparative Study of Industry Evolution and Structure*. Oxford University Press, Oxford: 165-196.

Malerba, F., Torrisi, S. and von Tunzelmann, N. (1991). The Electronic Computers. In Freeman, C. et al. (eds). *Technology and the Future of Europe*. Pinter Publishers, London: 95-116.

Conference papers and working papers

Corsino, M., Torrisi, S. (2022). Academic Engagement and the External Patenting of University Inventions. In Boosting knowledge & trust for a sustainable business. Referred Electronic Conference Proceedings Full Papers. FONDAZIONE CUEIM, Verona: 73-89, DOI: 7433/SRECP.FP.2022.01.

Corsino, M. and Torrisi, S. (2022). Academic engagement and the outside assignment of university patents, 82nd Annual Meeting of the Academy of Management, Seattle, USA, 8 August.

Capo, F. and D'Agostino, L. and Torrisi, S. (2022). The impact of COVID-19 on Digital Transformation: an empirical analysis of manufacturing companies, R&D Management Conference 2022, University of Trento, 11 July.

Capo, F. and D'Agostino, L. and Torrisi, S. (2022). Reward-based Crowdfunding: Where are we at? Società Italiana di Management (SIMA) 2022 Conference, Bocconi University, Milan, 1 July.

D'Agostino L., Tiraboschi, L. and Torrisi, S (2022). An exploratory analysis of the factors related to biotech patent oppositions at the European Patent Office, Società Italiana di Management (SIMA) 2022 Conference, Bocconi University, Milan, 1 July (RR).

Torodi, A.B., Torrisi, S. and Laursen, K. (2019). Knowledge Spillover Through Entrepreneurial Spawning. Incumbents' Knowledge Profile and Spinoffs Patterns of Entry, *SMS Special Conference*, Frankfurt, 13-15 June.

Torodi, A.B. and Torrisi, S. (2019). The Double-Edged Sword of Knowledge Inheritance. Knowledge Relatedness and Spin-Outs' Performance, *2019 Annual Conference of EPIP (European Policy for Intellectual Policy)*, ETH Zurich, 11-13 Sept.

Cappelli, R., Corsino, M., K. Laursen e Torrisi, S. (2018). Technological Competition & Patent Strategy: Protection, Blocking Rivals or the Freedom to Operate. Academy of Management Proceedings, Vol. 2018, No. 1. ISSN (online): 2151-6561, <u>https://doi.org/10.5465/AMBPP.2018.18067abstract</u>.(Academy of Management 2018 Annual Meeting, Chicago, US).

Corsino, M., Mariani, M. and Torrisi, S. (2017). On the Measurement of Knowledge Flows with Patent Citations, in Atinc, G. (ed.), *Academy of Management Proceedings - Best Papers*, 2017:1 12075; doi:10.5465/AMBPP.2017.123.

Tomaselli, A. Torrisi, S. and Ebbers, J. (2017). Intermediaries' Commitment in Investments and Performance of Project-based Ventures. *Academy of Management Proceedings* 2017:1 17626; doi:10.5465/AMBPP.2017.17626.

Cappelli, R., Corsino, M. and Torrisi, S. (2015). Patent strategies: traditional, proprietary and defensive. *Academy of Management Proceedings*. 2015:1 16217; doi:10.5465/AMBPP.2015.16217.

Torrisi, S., Toschi, L. and Zhang, C. (2014), Does Reputation Facilitate Startups' Access to Venture Capital Funding? *Academy of Management Proceedings*. 2014:113630; doi:10.5465/AMBPP.2014.13630.

Corsino, M., Giuri, P. and Torrisi, S. (2013). Patent Spinoffs: How Important Is the Organizational Environment? *Academy of Management Proceedings* 2013:1 15462; doi:10.5465/AMBPP.2013.15462.

Giuri, P. and Torrisi, S. (2010). Cross-licensing, Cumulative Inventions and Strategic Patenting. 5th *European Policy for Intellectual Property Policy Association (EPIP) Annual Conference*. Maastricht University, NL, 20-21 September.

Thoma, G., Torrisi, S., Gambardella, A., Guellec, D., Hall, B. H. and Harhoff, D. (2010). Harmonizing and Combining Large Datasets – An Application to Firm-level Patent and Accounting Data. Working Paper 15851, *NBER (National Bureau of Economic Research)*, Cambridge, MA, March (http://www.nber.org/papers/w15851).

Hall, B. H., Thoma, G. and Torrisi, S. (2009). Financial Patenting in Europe. Working Paper 14714. *NBER (National Bureau of Economic Research)*, Cambridge, MA, February (<u>http://www.nber.org/papers/w14714</u>).

Hall, B. H., Thoma, G. and Torrisi, S. (2007). The market value of patents and R&D: Evidence from European firms. Working paper 13426. *NBER (National Bureau of Economic Research)*, Cambridge, MA, September (<u>http://www.nber.org/papers/w13426</u>).

Hall, B. H., Thoma, G. and Torrisi, S. (2007). The market value of patents and R&D: Evidence from European firms. In Solomon, G. T. (ed.) *Academy of Management Proceedings - Best Papers*, August 1, 2007:1 1-6; doi:10.5465/AMBPP.2007.26530853.