MARC BOURREAU

Curriculum vitae

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1. Contact information

• Working address: Professor Marc Bourreau

Department of Economics and Social Sciences

Telecom Paris

19, place Marguerite Perey, 91120 Palaiseau, France

• Office number: 3A461

• Phone: +33 1 75 31 98 89

• E-mail: <u>marc.bourreau@telecom-paris.fr</u>

• Web: http://ses.telecom-paristech.fr/bourreau/

2. Personal information

• Nationality: French

• Born: 24 January 1969

3. Education

• 2003: Habilitation à Diriger des Recherches, University Panthéon-Sorbonne

1999: Ph.D. in Economics, University Panthéon-Assas
1993: MSc in Economics, University Paris Dauphine

• 1992: MSc in Engineering,

Ecole Nationale Supérieure des Télécommunications, Paris, France

4. Research interests

• Industrial Organization, Competition Policy, Regulation, Digital Economics, Economics of Telecommunications, Economics of Innovation

5. Professional experience

• 2007- Professor, Telecom Paris

• 2000-2007 Associate Professor, Telecom Paris

• 1997-2000 Regulatory Economist, France Telecom, Dpt. of Regulatory Affairs

• 1994-1997 Researcher, France Telecom research center (CNET)

6. Other positions

Head of the Innovation and Regulation Chair at Telecom Paris, 2011-

Telecom Paris service

- Head of Economics and Management Group, 2008-2011, 2020-
- Member of the School Council, 2018-
- Member of the Promotion Committee, 2018-

Research Fellow

- CESifo, Munich, 2017-
- Cepremap, Ecole Normale Supérieure, Paris, 2007-

Member of

- Center on Regulation in Europe (CERRE), Joint Academic Director, 2017-
- French Association in Digital Economics (AFREN), President, 2017-
- Scientific Committee, Florence School of Regulation, European University Institute, 2009-

Editorial positions

- Editor-in-Chief, *Information Economics & Policy*, since 2017 (Editor 2011-2016)
- Associate Editor, Review of Network Economics, since 2016
- Editorial Board, *Telecommunications Policy* (since 2009), *International Journal of Music Business Research* (since 2012), *Communications & Strategies* (2003-2017)

7. Research visits

• Various visits to the Harvard Kennedy School (2004-2020), the Institute Advanced Study in Princeton (2013-2015), Koç University (2003-2004), and to the Toulouse School of Economics (1997-2001)

8. Conference organization

Organizer:

- Annual International Conference in Digital Economics, Telecom Paris, 2006-
- Annual Doctoral Workshop in Digital Economics, 2012-
- Annual Summer School in Digital Economics, 2014-
- Workshop on the Economics of Telecommunications, Telecom Paris, 2009.
- Workshop on the Economics of E-Commerce, Telecom Paris, 2002.

Member of scientific committee:

- Florence School of Regulation Communications & Media Scientific Seminar, European University Institute, annual conference, 2012-
- ICT Conference, Munich, 2013
- AIM, La Rochelle, France, 2010

- International Telecommunications Society Conference, Montreal, Canada, 2008
- Co-track Chair (Economics of Information Systems), 29th International Conference on Information Systems (ICISS), Paris, France, 2008
- 6th Conference in Telecommunications Technoeconomics, Helsinki, Finland, 2007
- International Telecommunications Society Conference, Istanbul, Turkey, 2007

9. Refereeing services

Research grants:

• EU-ERC, ANR (France), KU Leuven, Université Catholique de Louvain, etc.

Journals:

• Journal of Political Economy, Journal of the European Economic Association, RAND Journal of Economics, European Economic Review, Management Science, International Journal of Industrial Organization, Journal of Industrial Economics, Journal of Economics and Management Strategy, Review of Industrial Organization, Journal of Economic Dynamics and Control, Journal of Public Economics, Journal of Regulatory Economics, European Journal of Law & Economics, International Journal of Production Economics, Economic Inquiry, Journal of Public Economic Theory, Information Economics and Policy, Telecommunications Policy, Review of Network Economics, Annales d'Economie et de Statistiques, and other journals.

10. PhD supervision

- Matthieu Manant, 2003-2007 (assistant professor at University Paris 11)
- Thomas Houy, 2004-2008 (assistant professor at Telecom Paris)
- Marianne Verdier, 2005-2008 (full professor at University Paris 2)
- Joeffrey Drouard, 2006-2010 (assistant professor at University Rennes 1)
- Serge Pajak, 2007-2011 (assistant professor at University Paris 11)
- Germain Gaudin, 2009-2013 (assistant professor, Copenhagen Business School)
- Sisley Maillard, 2011-2015 (economic analyst)
- Winston Maxwell, 2011-2016 (director law and digital tech studies, Telecom Paris)
- Carlotta Mariotto, 2014-2016 (European commission, Chief Economist Team)
- Maude Hasbi, 2013-2017 (postdoc at Chalmers University)
- Jordana Viotto, 2013-2017 (lecturer, Edinburg Business School)
- Rafael Ferraz, 2013-2018 (Competition secretariat, Brazilian government)
- Jean-Marc Zogheib, 2015-2019 (ATER at University Paris Sud)
- Arrah-Marie Jo, 2015-2019 (postdoc at University of Dauphine)
- Adrien Raizonville, since 2017
- Alexis Larousse (co-supervision with Marie-Laure Allain), since 2017
- Enrick Arnaud, since 2018
- Guillaume Thébaudin, since 2019

10. Awards and grants

Grants

- France Stratégie, "Taxation in the Digital Economy", 2014-2016
- ANR, "Digitization of Cultural Industries", 2009
- Ministry of Culture, "Diversity in Cultural Industries", 2008
- Ministry of Culture, "Economics of the French Recorded Music Industry", 2006
- ANR, "Virtual Communities", 2004

Awards

- 2014: Pommerehne Prize (best paper award) from the *Journal of Cultural Economics* for the paper "Selling less of more? The impact of digitization on record companies"
- 1999: Ph.D. thesis Prize, Institut de Recherches Economiques et Sociales sur les Télécommunications (IREST)
- 2000: Ph.D. Thesis Prize, Université Paris II Panthéon-Assas

11. Teaching

Graduate:

- Industrial Organization
- Digital Economics
- Economics of Platforms

Executive:

- Regulation of Telecommunications
- Network Industries and the Digital Economy

12. Citations

- Google Scholar: 2500+ citations; h-index 27; i10-index 53
- RePEc: among top-2000 authors (last 10 years)
- SSRN: top 10% of authors by all-time downloads

13. Current research projects and working papers

Current research projects:

- "Data Advantage of Platforms and Market Entry," with Pinar Dogan
- "Selling Cross-Border in Online Markets: The Impact of the Ban on Geoblocking Strategies," with Fabio Manenti
- "Asymmetric Infrastructure Competition and Strategic Choice of an Access Provider," with Romain Lestage
- "Public and Private Investments in Network Industries," with Jean-Marc Zogheib
- "The Market for Standard Essential Patents", with Yann Ménière and Tim Pohlmann
- "Digitization and Entrepreneurship: Self-releasing in the Recorded Music Industry," with Maya Bacache and François Moreau

• "Impact of Internet on the Pricing of CD Titles in France," with Lukasz Grzybowski

Working papers:

- "Market Entry and Fighting Brands: The Case of the French Mobile Telecommunications Market," with Yutec Sun and Frank Verboven, CEPR Discussion Paper No. DP12866 (April 2018). R&R at American Economic Review.
- "Licensing Standard Essential Patents with Costly Enforcement," with Yann Ménière and Rafael Ferraz. R&R at *Journal of Economics and Management Strategy*.
- "Mergers and Demand-Enhancing Innovation," with Bruno Jullien and Yassine Lefouili, TSE Working Paper, n° 18-907, March 2018.
- "Streaming Platform and Strategic Recommendation Bias," with Germain Gaudin, CESifo Working Paper No. 7390, December 2018 (submitted)
- "Co-investment, Uncertainty, and Opportunism: Ex-ante and Ex-post Remedies," with Carlo Cambini, Steffen Hoernig and Ingo Vogelsang (submitted).
- "Recent or Free? An Experimental Study of the Motivations for Pirating Movies," with Marianne Lumeau, François Moreau and Jordana Viotto, CESifo Working Paper No. 8036, January 2020 (submitted).

14. Publications

Publications in international journals

- 1. "Unbundling the Incumbent and Deployment of High-Speed Internet: Evidence from France," 2019, with Maude Hasbi and Lukasz Grzybowski, *International Journal of Industrial Organization*, 67, 102526.
- 2. "Net Neutrality and Asymmetric Platform Competition," 2019, with Romain Lestage, *Journal of Regulatory Economics*, 55(2), 140-171.
- 3. "Interchange Fees and Innovation in Payment Systems," 2019, with Marianne Verdier, *Review of Industrial Organization*, 54(1), 129-158.
- 4. "The value of consumer data in online advertising," 2018, with Bernard Caillaud and Romain De Njis, *Review of Network Economics*, 16(3), 269-289.
- 5. "Mergers, investments and demand expansion," 2018, with Bruno Jullien, *Economics Letters*, 167, 136-141.
- 6. "Gains from Digitization: Evidence from Gift-Giving in Music," 2018, with Pınar Doğan, *Journal of Economic Behavior and Organization*, 149, 106-122.
- 7. "Cooperative Investment, Access, and Uncertainty," 2018, with Carlo Cambini and Steffen Hoernig, *International Journal of Industrial Organization*, 56, 78-106.
- 8. "Digital Platforms, Advertising and Taxation," 2018, with Bernard Caillaud and Romain De Njis, *Journal of Public Economic Theory*, 20(1), 40-51.
- 9. "E-Commerce and the Market Structure of the Recorded Music Industry," 2017, with Romain Lestage and François Moreau, *Applied Economics Letters*, 24, 598-601.
- 10. "Size of RJVs and Degree of Cooperation in Product Development," 2016, with Pinar Doğan and Matthieu Manant, *International Journal of Industrial Organization*, 46, 77-106.
- 11. "Making money by giving it for free: Radiohead's pre-release strategy for In Rainbows," 2015, with Pinar Doğan and Sounman Hong, *Information Economics and Policy*, 32, 77-93.

- 12. "Geographical Access Markets and Investments in Next Generation Networks," 2015, with Carlo Cambini and Steffen Hoernig, *Information Economics and Policy*, 31, 13-21.
- 13. "Price distortion under fixed-mobile substitution", 2015, with Carlo Cambini and Steffen Hoernig, *Economia e Politica Industriale*, 42(4), 441-454.
- 14. "Net Neutrality with Competing Internet Platforms," 2015, with Frago Kourandi and Tommaso Valletti, *Journal of Industrial Economics*, 63(1), 30-73.
- 15. "Piracy and Creation: The Case of the Music Industry," 2015, with Maya Bacache and François Moreau, *European Journal of Law & Economics*, 39(2), 245-262.
- 16. "Fixed-Mobile Substitution and Termination Rates," 2015, with Steffen Hoernig (main author) and Carlo Cambini, *Telecommunications Policy*, 39(1), 65-76.
- 17. "Cooperative and Noncooperative R&D in Two-Sided Markets," 2014, with Marianne Verdier, *Review of Network Economics*, 13(2), 175-190.
- 18. "Old Technology Upgrades, Innovation, and Competition in Vertically Differentiated Markets," 2014, with Paolo Lupi and Fabio Manenti, *Information Economics and Policy*, 29, 10-31.
- 19. "Level of Access and Infrastructure Investment in Network Industries," 2014, with Pinar Doğan and Romain Lestage, *Journal of Regulatory Economics*, 46(3), 237-260.
- 20. "Access regulation and the transition from copper to fiber networks in telecoms," 2014, with Carlo Cambini and Pinar Doğan, *Journal of Regulatory Economics*, 45(3), 233-258.
- 21. "Progressive Entry and the Incentives to Invest in Alternative Infrastructures," 2014, with Joeffrey Drouard, *Journal of Regulatory Economics*, 45(3), 329-351.
- 22. "Fixed Mobile Integration," 2014, with Steffen Hoernig (main author) and Carlo Cambini, *Journal of Regulatory Economics*, 45(1), 57-74.
- 23. "Dynamic Entry and Investment in New Infrastructures: Empirical Evidence from the Fixed Broadband Industry," 2014, with Maya Bacache and Germain Gaudin. *Review of Industrial Organization*, 44(2), 179-209.
- 24. "Selling less of more? The impact of digitization on record companies," 2013, with François Moreau, Michel Gensollen, and Patrick Waelbroeck, *Journal of Cultural Economics*, 37(3), 327-346.
- 25. "Access Pricing, Competition, and Incentives to Migrate from "Old" to "New" Technologies," 2012, with Carlo Cambini and Pinar Dogan, *International Journal of Industrial Organization*, 30(6), 713-723.
- 26. "Level of access and competition in broadband markets," 2012, with Pinar Dogan, *Review of Network Economics*, 2012, Vol. 11(1).
- 27. "Ex-ante regulation and co-investment in the transition to next generation access," 2012, with Carlo Cambini and Steffen Hoernig, *Telecommunications Policy*, 36(5), 399-406.
- 28. "The impact of a radical innovation on business models: Incremental adjustments or big bang?" 2012, with François Moreau and Michel Gensollen, *Industry & Innovation*, 19(5), 415-435.
- 29. "Upstream Competition between Vertically Integrated Firms," 2011, with Johan Hombert, Jérôme Pouyet, and Nicolas Schutz, *Journal of Industrial Economics*, 59(4), 677-713.
- 30. "A Critical Review of the "Ladder of Investment" Approach," 2010, with Pinar Dogan and Matthieu Manant, *Telecommunications Policy*, 34(11), 683-696.
- 31. "Cooperation for Innovation in Payment Systems: The Case of Mobile Payments," 2010, with Marianne Verdier, *Communications & Strategies*.

- 32. "Component sharing through licensing," 2010, with Pinar Dogan, *Communications & Strategies*, n°77, 113-132.
- 33. "Private cards and the bypass of payment systems by merchants," 2010, with Marianne Verdier, *Journal of Banking and Finance*, 34(8), 1798-1807.
- 34. "Cooperation in Product Development and Process R&D Between Competitors," 2010, with Pinar Doğan, *International Journal of Industrial Organization*, 28(2), 176-190.
- 35. "Pirates or Explorers? Analysis of Music Consumption in French Graduate Schools," 2007, with D. Bounie and P. Waelbroeck, *Brussels Economic Review*, 50(2), 167-192.
- 36. "Modularity and Innovation in Digital Markets," 2007, with Pinar Doğan and Matthieu Manant, *Review of Network Economics*, 6 (2), 175-193.
- 37. "Piracy and the Demand for Films: Analysis of Piracy Behavior in French Universities," 2006, with David Bounie and Patrick Waelbroeck, *Review of Economic Research on Copyright Issues*, 3(2), 15-27.
- 38. "Build or Buy Strategies in the Local Loop," 2006, with Pınar Doğan, *American Economic Review, Papers & Proceedings*, 96(2), 72-76.
- 39. "Unbundling the Local Loop," 2005, with Pınar Doğan, *European Economic Review*, 49, 173-199.
- 40. "The impact of uncertainty about demand growth on preemption," 2004, *Journal of Economics & Business*, 56, 363-376.
- 41. "Service-based vs. infrastructure-based competition in local markets," 2004, with Pinar Doğan, *Information Economics and Policy*, 16, 287-306.
- 42. "Mimicking vs. Counter-programming Strategies for Television Programs," 2003, *Information Economics and Policy*, 15, 35-54.
- 43. "Regulation and Innovation in the Telecommunications Industry," 2001, with Pinar Doğan, *Telecommunications Policy*, 25, 167-184.

More policy-oriented publications:

- "Competition and Interoperability in Mobile Money Platform Markets: What Works and What Doesn't?" 2015, with Tommaso Valletti, *Communications & Strategies*, N°99, 11-32.
- "National FTTH Plans in France, Italy and Portugal," 2010, with Carlo Cambini and Steffen Hoernig, *Communications & Strategies*, n°78, 107-126.
- "An Economist's Guide to Local Loop Unbundling," 2005, with Edmond Baranès, *Communications & Strategies*, n°57, 13-31.
- "Comments on upload taxation plans," 2004, with Michel Gensollen, Laurent Gille, and Nicolas Curien, *Communications & Strategies*, n°55, 17-44.
- "Trends in Information and Communication Technologies," 2004, with Michel Gensollen, *Communications & Strategies*, n°53, 53-69.
- "Local loop unbundling: the case of France," 2003, *Communications & Strategies*, n°49, 119-135.
- "The Economics of Internet Flat Rates," 2001, *Communications & Strategies*, n°42, 131-152.

Books (in French)

- Les musiciens et la transformation numérique, with Maya Bacache and François Moreau, Editions Peter Lang, 2018.
- *Régulation des communications électroniques*, ouvrage collectif sous la direction de Marc Bourreau, Hermès, 2016.
- *Portrait des musiciens à l'heure du numérique*, with Maya Bacache and François Moreau, Opuscule du Cepremap, n°22, Editions rue d'Ulm, 2011.
- Les musiciens dans la révolution numérique : Inquiétude et enthousiasme, with Maya Bacache, Michel Gensollen and François Moreau, Editions de l'IRMA, 2009.

Chapters in books

- "Platforms," 2019, with Maya Bacache, *Handbook in Cultural Economics*, 3rd edition, Edward Elgar.
- "Les enjeux de la régulation des infrastructures," with Denis Lescop and Gérard Pogorel, in *Les dilemmes de l'économie numérique*, Laurent Gille (editor), éditions fyp, pp. 147-164, 2009.
- "Les marchés à 2 versants dans les médias," with David Bounie, in *Web Culture*, Xavier Greffe et Nathalie Sonnac (editors), Dalloz, pp. 477-491, 2008.
- "Economies of scale in media markets," in *The International Encyclopedia of Communication* (ed. Donsbach), Volume IV. Wiley-Blackwell (Oxford, UK and Malden, MA), pp. 1426-1430, 2008.
- "Online bidding and buying on the same site," with Christian Licoppe, in *Internet and Digital Economics*, Eric Brousseau and Nicolas Curien (eds), Cambridge University Press, pp. 510-535, 2007.
- "Pricing Information Goods: Pay vs. Free Content," with Virginie Lethiais, in *Internet and Digital Economics*, Eric Brousseau and Nicolas Curien (eds), Cambridge University Press, pp. 345-367, 2007.
- "Mimicking vs. Counter-programming Strategies for Television Programs," (reprint), *The Economics of the Mass Media*, Gillian Doyle (ed.), Edward Elgar Publishing, 2007.

Selected publications in French peer-reviewed journals

- "L'artiste maudit 2.0 : l'impact des TIC sur le revenu des musiciens", 2019, with Maya Bacache and François Moreau, *Revue Economique*, 70, 31-51.
- "Information Asymmetry and 360-Degree Contracts in the Recorded Music Industry", 2016, with Maya Bacache and François Moreau, *Revue d'Economie Industrielle*, N°156, 57-90.
- "Niveau d'accès et investissement dans les réseaux de télécommunications," 2016, with Pınar Doğan and Romain Lestage, *Revue Economique*, 67, 141-152.
- "Une analyse économique du phénomène de la longue traîne dans les industries culturelles", 2015, *Revue Française d'Economie*, 30(2), 179-216.

- "L'impact du piratage sur l'achat et le téléchargement légal : une comparaison de quatre filières culturelles," 2014, with Irène Bastard and François Moreau, *Revue Economique*, 65, 573-600.
- "De la visibilité à l'attention : les musiciens sur Internet," 2012, with Irène Bastard, Sisley Maillard and François Moreau, *Réseaux*, N°175, 19-42.
- "Les marchés à deux versants dans l'industrie des jeux vidéo," 2012, with Myriam Davidovici-Nora, *Réseaux*, N°174, 97-135.
- "L'impact de la suppression de la publicité sur les chaînes de télévision publiques,"
 2011, with Christian Grece, Revue Economique, 62(5), 781-811.
- "Incitations à l'entrée et incitations aux investissements dans le secteur des télécoms," 2011, with Pinar Dogan and Matthieu Manant, *Revue Française d'Economie*, 25(4), 147-181.
- "La détention et l'usage des instruments de paiement en France," 2007, with David Bounie, Abel François and Marianne Verdier. *Revue d'Economie Financière*, n°91, 53-76.
- "L'impact d'Internet et des Technologies de l'Information et de la Communication sur l'industrie de la musique enregistrée", 2006, with Michel Gensollen, *Revue d'Economie Industrielle*, N°116, 31-70.
- "Crise des ventes et téléchargements sur les réseaux peer-to-peer : le cas de la France," 2006, with Benjamin Labarthe-Piol, *Réseaux*, n°139, 106-144.
- "Le peer-to-peer et la crise de l'industrie du disque : une perspective historique," 2004, with Benjamin Labarthe-Piol, *Réseaux*, n°125, 17-54.
- "Sécurité des paiements et développement du commerce électronique," 2004, with David Bounie, *Revue Economique*, 55, pp. 689-714.
- "Communautés d'expérience et concurrence entre sites de biens culturels," 2003, with Michel Gensollen, *Revue d'Economie Politique*, 113, 61-89.
- "Concurrence par les services ou concurrence par les infrastructures dans les télécommunications," 2002, with Pınar Doğan, *Economie Publique*, n°12, 45-70.
- "Les économies d'échelle dans l'industrie des médias," 2002, with Michel Gensollen and Jérôme Perani, *Revue d'Economie Industrielle*, n°100, 119-135.
- "Mimétisme ou contre-programmation? Un modèle de concurrence entre programmes pour la télévision en clair," 2001, with Laurent Benzoni, *Revue d'Economie Politique*, 111, 885-908.
- "La boucle locale radio comme vecteur d'entrée dans les télécommunications," 2001, Revue Française d'Economie, 15, 111-143.

Selected policy reports

- "Big Tech Acquisitions: Competition and Innovation Effects and EU Merger Control,"
 2020, with Alexandre de Streel, CERRE Issue Paper.
- "Digital Conglomerates and EU Competition Policy", 2019, with Alexandre de Streel.
- "State Aid for Broadband Infrastructure in Europe: Assessment and Policy Recommendations," 2018, with Richard Feasey and Steffen Hoernig, CERRE Report.
- "Demand-Side Policies to Accelerate the Transition to Superfast Broadband," 2017, with Richard Feasey and Steffen Hoernig, CERRE Report.
- "Big Data and Competition Policy: Market Power, Personalised Pricing and Advertising," 2017, with Alexandre de Streel and Inge Graef, CERRE Report.

- "Les revues de sciences humaines et sociales en France : libre accès et audience," with Maya Bacache-Beauvallet and Françoise Benhamou, Rapport IPP N°11, 2015.
- "Enabling Digital Financial Inclusion through Improvements in Competition and Interoperability: What Works and What Doesn't?" 2015, with Tommaso Valletti, CGD Policy Paper 065.
- "Taxation and the digital economy: A survey of theoretical models," Final Report PSE-TSE-Telecom ParisTech, 2015.
- "Les revenus des musiciens en France," avec Maya Bacache et François Moreau, *Revue Juris Art & Culture*, 2013.
- "La diversité culturelle dans l'industrie de la musique enregistrée en France (2003-2008)", with François Moreau and Pierre Senellart, *Culture Etudes*, n°2011-5, 1-16,.
- "Musique enregistrée et numérique: quels scénarios d'évolution de la filière?" 2011, with Michel Gensollen and François Moreau, *Culture Prospective*, N°1, pp. 1-16, 2007.
- "Les comportements de paiement des français : description statistique et analyses économétriques," with David Bounie, Abel François and Ludovic Lebart, Rapport de contrat, Groupement CB, 2005.
- "Concurrence entre réseaux et accès bilatéral," with Jérôme Pouyet, Rapport CREST-LEI pour l'Autorité de Régulation des Télécommunications, 2004.
- "Tarification de l'accès : théorie et pratique," with Jérôme Pouyet, Rapport CREST-LEI pour l'Autorité de Régulation des Télécommunications, 2004.

15. Languages

• Fluent in French and English, basic knowledge of German