Philippe AghionCollège de France 3 rue d'Ulm 75005 Paris, France

philippe.aghion@insead.edu philippe.aghion@college-de-france.fr p.aghion@lse.ac.uk

EDUCATION

1976-80	Ecole Normale Supérieure de Cachan, Mathematics Section
1981	Diplome d'Etudes Approfondies d'Economie Mathématique, Université de Paris I
1983	Doctorat de 3 ^{éme} cycle d'Economie Mathématique, Université de Paris I-Pantheon-Sorbonne
1987 Ph.D.	Harvard University (Economics)

PROFESSIONAL EXPERIENCE

1986-87	Sloan Foundation Dissertation Fellowship
1987-89	Assistant Professor, Massachusetts Institute of Technology
1989-	Chargé de Recherches au Centre National de la Recherche Scientifique
1990-1992	Deputy Chief Economist, EBRD (London)
1992-96	Official Fellow, Nuffield College (Oxford)
1992-2000	Research Co-ordinator, EBRD (London)
1996-2002	Professor of Economics, University College London (UCL)
2000-2002	Professor of Economics, Harvard University
2002-2015	Robert C. Waggoner Professor of Economics, Harvard University
2009-2015	Invited Professor, Institute of International Economic Studies, Stockholm

2015-	Professor at College de France, Chair entitled "Institutions, Innovation, et Croissance"
2015-	Centennial Professor of Economics, London School of Economics
2018-2020	Visiting Professor, Department of Economics, Harvard University
2020-	Professor at INSEAD

OTHER PROFESSIONAL POSITIONS OR APPOINTMENTS

1991-97	Associate Editor, Review of Economic Studies
1992-	Managing Editor, The Economics of Transition
1993-	Fellow of the Econometric Society
1992-95	Associate Editor, Econometrica
1995-2000	Council, European Economic Association
1998-2006	CEPR Program Director in Industrial Organization
2008-2016	Editor, Review of Economics and Statistics
2009-	Fellow of the American Academy of Arts and Science
2015-	Foreign Fellow of the British Academy
2016-	Managing Editor, Annual Reviews in Economics
2016-2017	President of the European Economic Association
2016-2017	President of the French Economic Association

AWARDS AND HONORS

1995	Medaille	de Bronz	e du	CNRS
1773	Medanie	ue bronz	e au	CINIC

- 2001 Prix de la Revue Française d'Economie
- 2001 Yrjo Jahnsson Award of the European Economic Association
- 2005 Honorary Doctorate, Stockhom School of Economics
- 2006 Medaille d'Argent du CNRS
- 2006 Schumpeter Prize of the International Schumpeter Society
- 2009 John Von Neumann Award
- 2016 Global Award in Entrepreneurship Research
- 2017 AEA Award for best AEJ paper
- 2017 Foreign Honorary Member of the American Economic Association

2017 Sun Yefang Award

2018 Honorary Doctorate, University of Tucuman

2020: BBVA Frontier of Knowledge Award

2021: Honorary Doctorate, Universite du Quebec a Montreal (UQAM)

2021: Honorary Doctorate, Universite de Liege

2022: Erasmus Award

2022: Prix Jean-Jacques Laffont, Toulouse School of Economics

Professional Societies and Memberships:

1991-	Fellow of CEPR and of the European Financial Network
1991-	Member of the Executive and Supervisory Committee of CERGE (Prague)
1994-	Fellow, Econometric Society
2009-	Fellow, American Academy of Arts and Sciences
2015-	Foreign Fellow of the British Academy
2017-	Economic Theory Fellow

Lectures:

August 1995	Invited Lecture at the World Congress of the Econometric Society, Tokyo
Fall 1997	Raffaele Mattioli Memorial Lectures, Bocconi, Milan
June 1999	Walras-Bowley Lecture, Madison
Spring 2000	Michael Bruno Lecture, Jerusalem
Spring 2001	Clarendon Lectures, Oxford
Fall 2001	Zeuthen Lectures, Copenhagen
Spring 2003	Kuznets Lectures, Yale University
August 2005	Schumpeter Lecture, EEA Congress, Amsterdam
April 2006	Douglas North Lecture, Washington University in St Louis
Spring 2007	Gorman Lectures, University College London
Fall 2007	Munich Lectures, University of Munich

Fall 2007	Cairoli Lectures, University Di Tella, Buenos Aires
January 2009	Lionel Robbins Lectures, London School of Economics
May 2009	Schumpeter Lectures, Graz, Austria
January 2012	Maddison Lecture, OECD
January 2013	Schumpeter Lecture, Stockholm
August 2015	Elmhirst Lecture, ICAE, Milan
Sept 2016	Woodward Lecture, UBC, Vancouver
August 2017	Presidential Address, EEA Congress
May 2018	Zvi Griliches Lectures, NES, Moscow
June 2018	Ronald Coase Lecture, LSE
Fall 2018	WZB Distinguished Lecture, Berlin
June 2022	Nancy Schwartz Memorial Lecture, Northwestern University

Bibliography:

Published Papers:

On the Generic Inefficiency of Differentiable Market Games (1985), Journal of Economic Theory

Contracts as a Barrier to Entry (1987), *American Economic Review* 77(3): 388-401, reprinted in *Industrial Economics*, Oliver Williamson, ed., Edward Elgar Publishing Limited (1990) with Bolton P

The Financial Structure of the Firm and the Problem of Control (1989), *European Economic Review*, with Bolton P.

On Renegotiation Design (1989), *European Economic Review* 34 (2/3): 322-329, with Dewatripont M and Rey P

Legal Restrictions on Private Contracts can Enhance Efficiency (1990), *Journal of Law, Economics and Organisations* with Hermalin B.

Government Domestic Debt and the Risk of Default: A Political-Economic Model of the Strategic Role of Debt (1990) with Bolton P., published in "Capital Markets and Debt Management", R. Dornbusch and M. Draghi, eds., Cambridge, MA: MIT Press.

Unemployment: A Symptom of Stagnation or a Side-Effect of Growth? (1991), *European Economic Review* 35: 535-541, with Howitt P.

Optimal Learning by Experimentation (1991), *Review of Economic Studies* 58(4): 621-654, with Bolton P, Harris C and Jullien B.

An Incomplete Contracts Approach to Financial Contracting (1992), *Review of Economic Studies* 59(3): 473-494, with Bolton P.

A Model of Growth through Creative Destruction (1992), *Econometrica* 60(2): 323-351, with Howitt P.

The Economics of Bankruptcy Reform (1992), *Journal of Law, Economics and Organisation*, and forthcoming in the NBER volume on *Transition in Eastern Europe* with Hart O. and Moore J.

Distribution and Growth in Models of Imperfect Capital Markets (1992), European Economic Review, Papers and Proceedings of the 6th Annual Congress of the European Economic Association 36(2/3): 603-611, with Bolton P.

Financing and Development in Eastern Europe and the Former Soviet Union (1992), *Financial Institutions in Europe*, CEPR and Cambridge, with Burgess R.

Economic Reform in Eastern Europe: Can Theory Help? (1993), European Economic Review.

Dynamic Duopoly with Learning Through Price-Experimentation (1993), *Economic Theory*, with Espinoza M. and Jullien B.

Renegotiation Design With Unverifiable Information (1994), *Econometrica* 62(2): 257-282; lead article, with Dewatripont M. and Rey P.

Growth and Unemployment (1994), Review of Economic Studies 61(3): 477-494, with Howitt P.

On the Management of Innovation (1994), Quarterly Journal of Economics, with Tirole J.

On the Speed of Transition in Central Europe (1994), NBER Macro Annuals with Blanchard O.

The Behaviour of State Firms in Eastern Europe, Pre-Privatisation (1994), *European Economic Review* (ISOM issue), with Blanchard O. and Burgess R.

Uncovering Some Casual Relationships between Productivity Growth and the Structure of Economic Fluctuations (1994), *NBER* and *Labour*, with St Paul G.

Opening the Black Box of Innovation (1994), European Economic Review with Tirole J.

Some Implications of Growth for Ownership Structure and Organisational Forms (1995), *European Economic Review*, with Tirole J.

Technical Progress in the Theory of Economic Growth (1995), in *Economics in a Changing World: Proceedings of the 10th World Congress of the International Economic Association, vol 5*, Jean-Paul Fitoussi, ed., London: Macmillan, pp 101-122, with Howitt P.

Research and Development in the Growth Process (1996), *Journal of Economic Growth* 1: 49-73, with Howitt P.

The Observational Implications of Schumpeterian Growth Theory (1996), *Empirical Economics* 21: 13-25, with Howitt P.

On Insider Privatisation (1996), European Economic Review, with Blanchard O.

Competition and Growth with Step-by-Step Innovation; An Example (1997), *European Economic Review* 41: 771-782, with Harris C. and Vickers J.

Corporate Governance, Competition Policy and Industrial Policy (1997), *European Economic Review* 41(3-5): 797-805, with Dewatripont M. and Rey P.

Real and Formal Authority in Organizations (1997), lead article in the *Journal of Political Economy*, with Tirole J.

A Theory of Trickle-Down Growth and Development (1997), lead article in the *Review of Economic Studies* 64(2): 151-172, with Bolton P.

A Schumpeterian Perspective on Growth and Competition (1997), in *Advances in Economics and Econometrics*, invited lecture to the 7th World Congress of the Econometrics Society, D. Kreps ed., with Howitt P.

The Economics of Enterprise Restructuring in Central and Eastern Europe, (1997), in *Property Relations, Incentives and Welfare*, J. Roemer ed., McMillan Press and St. Martin's Press, with Blanchard O. and Carlin W.

A Schumpeterian Perspective on Growth and Competition (1997), in *Advances in Economics and Econometrics: Theory and Applications, vol. 2*, D.M. Kreps and K.F. Wallis, eds., Cambridge University Press, pp 279-317, with Howitt P.

Ajustement macroéconomique aux technologies multi-usage (1997), *l'Actualité économique, Revue d'analyse économique* 73: 575-593, with Howitt P.

Bargaining While Searching for Outside Options: A Potential Role for Unions (1998), *European Economic Review*, with Compte O. and Jehiel P.

Capital Accumulation and Innovation as Complementary Factors in Long-Run Growth (1998), *Journal of Economic Growth* 3: 111-130, with Howitt P.

Market Structure and the Growth Process (1998), *Review of Economic Dynamics* 1: 276-305, with Howitt P.

On the Macroeconomic Effects of Major Technological Change (1998), in *General Purpose Technologies and Economic Growth*, E. Helpman, ed., Cambridge, MA: MIT Press, pp 121-144, with Howitt P.

Competition, Financial Discipline, and Growth (1999), *Review of Economic Studies* 66(4): 825-852, with Dewatripont M. and Rey P.

Dualism and Macroeconomic Volatility (1999), *Quarterly Journal of Economics*, with Banerjee A. and Piketty T.

Inequality and Economic Growth: The Perspective of the New Growth Theories (1999), *Journal of Economic Literature* with Caroli E. and Garcia-Penalosa C.

Optimal Design of Bank Bailouts: The Case of Transition Economies (1999), *Journal of Institutional and Theoretical Economics*, with Bolton P. and Fries S.

Competition, Entry, and the Social Returns to Infrastructure in Transition Economies (1999), *Economics of Transition*, with Schankerman M.

A Simple Model of Monetary Policy and Currency Crises (2000), *European Economic Review*, with Banerjee A. and Bacchetta P.

Contagious Bank Failures in a Free Banking System (2000), *European Economic Review*, with Bolton P. and Dewatripont M.

Competition, Imitation and Growth with Step-by-Step Innovation (2001), *Review of Economic Studies* 68(3): 467-492; lead article, with Harris C., Howitt P. and Vickers J.

Currency Crises and Monetary Policy in an Economy with Credit Constraints (2001), *European Economic Review, ISOM Volume*, with Bacchetta P. and Banerjee A.

Deunionization, Technical Change and Inequality (2001), Carnegie-Rochester Conference Series on Public Policy 55: 229-264, with Acemoglu D. and Violante G.L.

Schumpeterian Growth Theory and the Dynamics of Income Inequality (2002), *Walras-Bowley Lecture*, *Econometrica*

General Purpose Technologies and Within-group Inequality (2002), *Journal of Economic Growth*, with Howitt P. and Violante G.

On Partial Contracting (2002), *European Economic Review, Papers and Proceedings*, with Dewatripont M. and Rey P.

Allocating Decision Rights under Liquidity Constraints: A Simple Framework (2002), in *Essays on Incomplete Contracts*, Cambridge University Press, E.Brousseau Ed., with Rey P.

Incomplete Social Contracts (2003), *Journal of the European Economic Association*, with Bolton P.

Vertical Integration and Distance to Frontier (2003), *Journal of the European Economic Association, Papers and Proceedings*, with Acemoglu D. and Zilibotti F.

Endogenous Political Institutions (2004), *Quarterly Journal of Economics*, with Alesina A. and Trebbi F.

Transferable Control (2003), *Journal of the European Economic Association*, with Dewatripont M. and Rey P.

A Balance-Sheet Approach to Currency Crises (2004), *Journal of Economic Theory*, with Bacchetta P., and Banerjee A.

Capital Markets and the Instability of Open Economies (2004), *Journal of Monetary Economics*, with Bacchetta P. and Banerjee A.

A Model of the Private and Social Returns to Market-Enhancing Infrastructure (2004), *Economic Journal*, with Schankerman M.

Exit Options in Corporate Finance: Liquidity versus Incentives (2004), *Review of Finance*, with Bolton P. and Tirole J.

The Effect of Financial Development on Convergence (2005), *Quarterly Journal of Economics*, with Howitt P. and Mayer D.

Competition and Innovation: An Inverted U Relationship (2005), *Quarterly Journal of Economics*, with Bloom N., Blundell R., Griffith R. and Howitt P.

Distance to Frontier, Selection, and Economic Growth (2006), *Journal of the European Economic Association*, with Acemoglu D., and Zilibotti F.

Appropriate Growth Policy, Schumpeter Lecture (2006), *Journal of the European Economic Association*, with Howitt P.

Competition and Vertical Integration (2006), *American Economic Review, Papers and Proceedings*, with Griffith R. and Howitt P.

Distance to Frontier, Growth, and the Composition of Human Capital (2006), *Journal of Economic Growth*, with Meghir C. and Vandenbussche J.

Choosing Electoral Rules: Theory and Evidence from US Cities (2007), *Quarterly Journal of Economics*, with Alesina A. and Trebbi F.

Growth versus Profit Maximizing Strategies over the Cycle: Giving the Market What It Wants (2007), *Journal of Finance*, with Stein J.

Technology, Information, and the Decentralization of the Firm (2007), *Quarterly Journal of Economics*, with Acemoglu D., Lelarge C., Van Reenen J. and Zilibotti F.

Negotiating Free Trade (2007), *Journal of International Economics*, with Antras P. and Helpman E.

Credit Constraints as a Barrier to the Entry and Post Entry Growth of Firms: Theory and Evidence (2007), *Economic Policy*, with Fally T., and Scarpetta S.

Productivity Growth and Countercyclical Budgetary Policy: What Do We Learn from OECD Panel Data? (2007), *NBER Macroeconomic Annual*, with Marinescu I. Entry, Innovation, and Growth: Theory and Evidence (2007), *Review of Economics and Statistics*, with Blundell R., Griffith R., Howitt P. and Prantl S.

Democracy, Technology, and Growth, forthcoming in *Institutions and Economic Performance* (2007), Helpman E, ed., Harvard University Press, with Alesina A., and Trebbi F.

The Unequal Effects of Liberalization: Evidence from Dismantling the License Raj in India (2008), *American Economic Review* 94 (4): 1397-1412, with Burgess R., Redding S. and Zilibotti F.

Acedemic Freedom, Private Sector Focus, and the Process of Innovation (2009), *Rand Journal of Economics*, with Dewatripont M. and Stein J.

Vertical Integration and Technology: Theory and Evidence (2009), *Journal of the European Economic Association*, with Acemoglu D., Griffith R. and Zilibotti F.

Exchange Rate Regimes and Productivity Growth (2009), *Journal of Monetary Economics*, with Bacchetta P., Ranciere R. and Rogoff K.

Distrust and Regulation (2010), *Quarterly Journal of Economics*, with Algan Y., Cahuc P. and Shleifer A.

Governance and Peformance of Universities (2010), *Economic Policy*, with Dewatripont M., Hoxby C., Mas-Colell A. and Sapir A.

Volatility and Growth: Financial Development and the Cyclical Composition of Investment (2011), *Journal of Monetary Economics*, with Angeletos M., Banerjee A. and Manova K.

Civil Society and the State: The Interplay Between Cooperation and Minimum Wage Regulation (2011), *Journal of the European Economic Association*, with Algan Y. and Cahuc P.

Incomplete Contracts and the Theory of the Firm: What Have We Learned Over the Past 25 Years? (2011), *Journal of Economic Perspectives*, with Holden R.

The Relationship Between Health and Growth: When Lucas Meets Nelson-Phelps (2011), *Institutional Economic*, with Howitt P. and Murtin F.

The Environment and Directed Technical Change (2012), *American Economic Review*, with Acemoglu D., Bursztyn L. and Hemous D.

Subgame Perfect Implementation With Informational Perturbations (2012), *Quarterly Journal of Economics* 127: 1843-1881, with Fudenberg D., Holden R., Kunimoto T. and Tercieux O.

Credit Constraints and the Cyclicality of R&D Investments: Evidence from France (2013), *Journal of the European Economic Association*, with Askenazy P., Berman N., Cette G. and Eymard L.

Innovation and Institutional Ownership (2013), *American Economic Review*, with Van Reenen J. and Zingales L.

Revisiting the Relationship Between Competition, Patenting and Innovation (2013), *Advances in Economic Theory*, Econometric Society World Congress, with Howitt P. and Prantl S.

What Do We Learn From Schumpeterian Growth Theory? (2013), *Handbook of Economic Growth*, with Akcigit U., and Howitt P.

Credit Constraints, Cyclical Fiscal Policy and Industry Growth (2014), *Journal of Monetary Economics*, with Hemous D. and Kharroubi E.

Incomplete Contracts and the Internal Organization of Firms (2014), *Journal of Law, Economics, and Organizations*, with Bloom N., and Van Reenen J.

Industrial Policy and Competition (2016), *American Economic Journal: Macroeconomics*, Sun Yefang Award 2017, with Cai J., Dewatripont M., Du L., Harrison A., and Legros P.

Patent Rights, Product Market Reforms and Innovation (2016), *Journal of Economic Growth*, with Howitt P., Prantl S.

Carbon Taxes, Path Dependency and Directed Technical Change: Evidence from the Auto Industry (2016), *Journal of Political Economy*, lead article, with Dechezlepretre A., Hemous D., Martin R., and Van Reenen J.

Of Mice and Academics: Examining the Effect of Openness on Innovation (2016), *American Economic Journal: Policy*, Best AEJ Paper Award 2017, with Murray F., Dewatripont M., Kolev J., and Stern S.

Inducing Leaders to Take Risky Decisions: Dismissal, Tenure, and Term Limits (2016), *American Economic Journal: Microeconomics*, with Jackson M.

Corruption, and Growth (2016), European Economic Review, with Akcigit U., Cage J., and Kerr, W.

Creative Destruction and Subjective Well Being (2016), *American Economic Review*, with Akcigit U., Deaton A., and Roulet A.

Subgame Perfect Implementation Under Approximate Common Knowledge: Evidence from a Laboratory Experiment (2016), mimeo Harvard and NBER Working Paper, *Journal of the European Economic Association*, with Fehr E., Holden R., and Wilkening T.

Artificial Intelligence and Economic Growth (2017), *NBER Working Papers*, with Jones B., and Jones C.

On the Returns to Invention Within Firms: Evidence from Finland (2018), *American Economic Review, Papers and Proceedings*, with Akcigit U., Hyytinen A., and Toivanen O.

Firm Dynamics and Growth Measurement in France (2018), *Journal of the European Economic Association*, with Bergeaud A., Boppart T., and Bunel S.

The Causal Effects of Competition on Innovation: Experimental Evidence (2018), *Journal of Law, Economics and Organizations*, with Bechtold S., Cassar L., and Herz H.

Innovation and Top Income Inequality (2019), *Review of Economic Studies*, lead article, with Akcigit U., Bergeaud A., Blundell R., and Hemous D.

The Inverted-U Relationship Between Credit Access and Productivity Growth (2019), Coase Lecture, *Economica*, with Bergeaud A., Cette G., Lecat R., and Maghin H.

Monetary Policy, Product Market Competition, and Growth (2019), Coase Lecture, *Economica*, with Farhi E., and Kharroubi E.

Missing Growth from Creative Destruction (2019), *American Economic Review*, with Bergeaud A., Boppart T., Klenow P., and Li H.

Turbulence, Firm Decentralization and Growth in Bad Times (2019), forthcoming in *American Economic Journal: Applied*, with Bloom N. Lucking B., Sadun R., and Van Reenen J.

Education and Military Rivalry (2019), *Journal of the European Economic Association*, with Jaravel X., Persson T., and Rouzet D.

Environmental Preferences and Technological Choices: Is Market Competition Dirty or Clean? (2021), forthcoming, *American Economic Review Insights*, with Benabou R., Martin R., and Roulet A.

Exports and Innovation: Theory and Evidence (2022), forthcoming, *Review of Economics and Statistics*, with Bergeaud, A., Lequien, M., and Melitz M.

A Year Older, A Year Wiser: Invention Spillovers and Human Capital Depreciation (2022), forthcoming, *Review of Economics and Statistics* with Akcigit, U., Hyytinen, A., and Toivanen, O.

The Effect of COVID Certificates on Vaccine Uptake, Health Outcomes, and the Economy (2022), forthcoming, *Nature*, with Oliu-Barton M, Pradelski B, and Woloszko N.

Innovation Networks and Business Stealing (2022), forthcoming in *The Economics of Creative Destruction*, U. Akcigit and J. Van Reenen editors, Harvard University Press, with Jackson, M., Mayerowitz, A., and Tagade, A.

Books:

Endogenous Growth Theory (1998), Cambridge, MA: MIT Press, with Howitt P.

Inequality, Growth, and Globalization - Theory, History and Policy (1999), Raffaele Mattioli Memorial Lecture, *Cambridge University Press*, with Williamson J.

An Agenda for a Growing Europe: The Sapir Report (2003), Oxford University Press, with Bertola G., Hellwig M., Pisani-Ferry J., Sapir A., Vinals J., and Wallace H.

Education et Croissance (2004), La Documentation Française, with Cohen E.

Volatility and Growth (2005), Clarendon Lectures, Oxford University Press, with Banerjee A.

Competition and Growth (2005), Zeuthen Lectures, MIT Press, with Griffith R.

Handbook of Economic Growth (2005), North-Holland: Elsevier, with Durlauf S.

The Economics of Growth (2009), MIT Press, with Howitt P.

Repenser l'Etat (2011), Seuil, with Roulet A.

Handbook of Economic Growth (2013), Volume II, North-Holland: Elsevier, with Durlauf S.

Changer de modele (2014), *Odile Jacob*, with Cette G., and Cohen E.

Repenser la croissance economique (2016), Fayard

Le pouvoir de la destruction créatrice (2020), *Odile Jacob*, with Antonin C., and Bunel S.

The Power of Creative Destruction (2021), *Harvard University Press*, with Antonin C., and Bunel S.

Papers Under Revision:

The Impact of Regulation on Innovation (2021), under revision for the *American Economic Review*, with Bergeaud A., and Van Reenen J.

A Theory of Falling Growth and Rising Rents (2021), under revision for the *Review of Economic Studies*, with Bergeaud A., Boppart T., Li H., and Klenow P.

The Vertical and Horizontal Components of the China Shock: Firm-Level Evidence from France (2021), under revision for the *American Economic Journal*, with Bergeaud A., Lequien M., Melitz M., and Zuber T.

Working Papers:

Exploiting States' Mistakes to Identify the Causal Impact of Higher Education on Growth (2009), *Mimeo Harvard*, with Boustan L., Hoxby C. and Vandenbussche J.

Parental Education and Invention: The Finnish Enigma (2022) with Akcigit, U., Hyytinen, A., and Toivanen, O.

Climate Change, Directed Innovation, and Energy Transition: The Long-run Consequences of the Shale Gas Revolution (2022), with Acemoglu D., Barrage L., and Hemous D.

The Innovation Premium to Soft Skills in Low-Skilled Occupations (2022), with Bergeaud A., Blundell R., and Griffith R.

Tax Evasion versus Tax Simplicity: Evidence from the Self-Employed in France (2022), with Akcigit U., Gravoueille M., Lequien M., and Stantcheva S.

Spreading Knowledge Across the World: Innovation Spillover Through Trade Expansion (2021), with Bergeaud A., Gigout T., Lequien M., and Melitz M.

Modern Manufacturing Capital, Labor Demand, and Product Market Dynamics: Evidence from France (2022), with Antonin C., Bunel S., and Jaravel X.

Current projects:

• Papers:

Good Rents and Bad Rents: Growth and R&D Misallocation, with Bergeaud, A., Boppart, T., Klenow, P., and Li, H.

Chinese research and US collaborations with Antonin, C., Stromberg, D., and Sun, X.

Income Mobility: Evidence from French Panel Data with Ciornohuz V., Gravoueille M., and Stantcheva S.

Structural Change and Emissions with Boppart T., Peters M., Zilibotti F., and Schwartzman M.

The Effects of Research Tax Credit on Innovation in France with Chanut N. and Jaravel X.

Infrastructure and Innovation: Evidence from France with Duranton G., Lequien M. and Pintus P.

Outsourcing and the Environment with Bergeaud A., Hemous D.

• Books:

Growth Economics - graduate textbook with Akcigit U. and Howitt P., MIT Press

The Economics of Creative Destruction, Ferschrift Volume edited by Akcigit U. and J. Van Reenen J. *Harvard University Press*