References

- Aage, T., Belussi, F. (2008), From fashion to design: creative networks in industrial districts, *Industry and Innovation*, **15**, 475–491.
- Abramovitz, M. (1956), Resources and output trends in the US since 1870, *American Economic Review*, **46**, 5–23.
- Abramovitz, M. (1989), *Thinking About Growth*, Cambridge, UK: Cambridge University Press.
- Acemoglu, D. (1998), Why do new technologies complement skills? Directed technical change and inequality, *Quarterly Journal of Economics*, **113**, 1055–1089.
- Acemoglu, D. (2002), Directed technical change, *Review of Economic Studies*, **69**, 781–810.
- Aghion, P., Howitt, P. (1992), A model of growth through creative destruction, *Econometrica*, **60**, 323–351.
- Aghion, P., Howitt, P. (1998), *Endogenous Growth Theory*, Cambridge, MA: MIT Press.
- Aghion, P., Tirole, J. (1994), The management of innovation, *Quarterly Journal of Economics*, **CIX**, 1185–1209.
- Amatori, F. (1999), *La grande impresa*, in Amatori, F., Bigazzi, D., Giannetti, R., Segreto, L. (eds), *Storia d'Italia. Annali*, vol. XV, *L'industria*, Einaudi, Torino.
- Anderson, P.W., Arrow, K.J., Pines, D. (eds) (1988), *The Economy as an Evolving Complex System*, Redwood City, CA: Addison-Wesley.
- Ando, A., Guiso, L., Visco, I. (eds) (1994), *Saving and the Accumulation of Wealth*, New York: Cambridge University Press.
- Annunziato, P., Manfroni, P., Rosa, G. (1992), *La stima del capitale per settore e area geografica e alcuni indici di produttività*, Rome: Confindustria.
- Antonelli, C. (1989), A failure-inducement model of research and development expenditures: Italian evidence from the early 1980s, *Journal of Economic Behaviour and Organization*, **12**, 159–180.
- Antonelli, C. (1995), *The Economics of Localized Technological Change and Industrial Dynamics*, Boston, MA: Kluwer Academic Publisher.

- Antonelli, C. (1999), *The Microdynamics of Technological Change*, London: Routledge.
- Antonelli, C. (2001), *The Microeconomics of Technological Systems*, Oxford: Oxford University Press.
- Antonelli, C. (2003), *The Economics of Innovation, New Technologies and Structural Change*, London: Routledge.
- Antonelli, C. (2007), The system dynamics of collective knowledge: from gradualism and saltationism to punctuated change, *Journal of Economic Behavior and Organization*, **62**, 215–236.
- Antonelli, C. (2008a), Pecuniary knowledge externalities and the emergence of directed technological change and innovation systems, *Industrial and Corporate Change*, **17**, 1049–1070.
- Antonelli, C. (2008b), *Localized Technological Change: Towards the Economics of Complexity*, London: Routledge.
- Antonelli, C. (2009), Localized appropriability: pecuniary externalities in knowledge exploitation, *Technology Analysis and Strategic Management*, **21**, 727–742.
- Antonelli, C. (ed.) (2011a), *Handbook on the Economic Complexity of Technological Change*, Cheltenham, UK: Edward Elgar.
- Antonelli, C. (2011b), Knowledge governance, pecuniary knowledge externalities and total factor productivity growth, WP Laboratorio di Economia dell’Innovazione Franco Monnigiano, Dipartimento di Economia “S. Cogneetti de Martiis”, Università di Torino & BRICK Working Papers, Collegio Carlo Alberto.
- Antonelli, C., Barbiellini Amidei, F. (2007), Innovazione tecnologica e mutamento strutturale nell’industria italiana nel secondo dopoguerra, in Antonelli, C. et al. (eds), *Innovazione tecnologica e sviluppo industriale nel secondo dopoguerra*, Rome: Collana Storica della Banca d’Italia, Laterza, pp. 3–358.
- Antonelli, C., Garofalo, G. (1978), La competitività italiana nel settore delle macchine utensili per la lavorazione dei metalli, in Alessandrini, P. (ed.), *Specializzazione e competitività internazionale dell’Italia*, Bologna: Il Mulino.
- Antonelli, C., Marchionatti, R. (1998), Technological and organizational change in a process of industrial rejuvenation. The case of the Italian cotton textile industry, *Cambridge Journal of Economics*, **22**, 1–18.
- Antonelli, C., Petit, P., Tahar, G. (1992), *The Economics of Industrial Modernization*, London: Academic Press.
- Antonelli, C., Quatraro, F. (2010), The effects of biased technological

- change on total factor productivity. Empirical evidence from a sample of OECD countries, *Journal of Technology Transfer*, **35**, 361–383.
- Antonelli, C., Teubal, M. (2010), Venture capital as a mechanism for knowledge governance, in Viale, R., Etzkowitz, H. (eds), *The Capitalization of Knowledge*, Cheltenham, UK: Edward Elgar, pp. 98–120.
- Ark, B. van (1996), Sectoral growth accounting and structural change in post-war Europe, in Ark, B. Van, Crafts, N.F.R. (eds), *Quantitative Aspects of Post-war European Economic Growth*, Cambridge, UK: Cambridge University Press, pp. 84–165.
- Ark, B. van, Crafts, N.F.R. (eds) (1996), *Quantitative Aspects of Post-war European Economic Growth*, Cambridge, UK: Cambridge University Press.
- Arora, A., Fosfuri, A., Gambardella, A. (2001a), *Markets For Technology*, Cambridge, MA: MIT Press.
- Arora, A., Fosfuri, A., Gambardella, A. (2001b), Specialized technology suppliers, international spillovers and investment: evidence from the chemical industry, *Journal of Development Economics*, **65**, 31–54.
- Arrow, K.J. (1962a), Economic welfare and the allocation of resources for invention, in Nelson, R.R. (ed.), *The Rate and Direction of Inventive Activity: Economic and Social Factors*, Princeton, NJ: Princeton University Press for N.B.E.R., pp. 609–625.
- Arrow, K.J. (1962b), The economic implications of learning by doing, *Review of Economic Studies*, **29**, 155–173.
- Arrow, K.J. (1969), Classificatory notes on the production and transmission of technical knowledge, *American Economic Review*, **59**, 29–35.
- Arrow, K.J. (1974), *The Limits of Organization*, New York: W.W. Norton.
- Arthur, W.B., Durlauf, S.N., Lane, D.A. (eds) (1997), *The Economy as an Evolving Complex System II*, Redwood City, CA: Addison-Wesley.
- Atkinson, A.B., Stiglitz, J.E. (1969), A new view of technological change, *Economic Journal*, **79**, 573–578.
- Barbiellini Amidei, F., Goldstein, A., Spadoni, M. (2010), European acquisitions in the United States: re-examining Olivetti-Underwood fifty years later, Banca d'Italia Economic History Working Papers, no. 2.

- Barbiellini Amidei, F., Impenna, C. (1999), Il mercato azionario e il finanziamento delle imprese negli anni Cinquanta, in F. Cotula (ed.), *Stabilità e sviluppo negli anni Cinquanta. Politica bancaria e struttura del sistema finanziario*, Roma-Bari: Collana storica della Banca d'Italia. Contributi, vol. VII.3, Laterza.
- Barca, F. (ed.) (1997), *Storia del capitalismo italiano dal dopoguerra a oggi*, Rome: Donzelli.
- Barca, F., Magnani, M. (1989), *L'industria fra capitale e lavoro*, Bologna: Il Mulino.
- Bazzigaluppi, G., Gerosa, A. (1974), Profitti e processo di investimento: un'analisi disaggregata, *L'Industria*, **4**, 58–79.
- Beaudry, C., Breschi, S. (2003), Are firms in clusters really more innovative?, *Economics of Innovation and New Technology*, **12**, 325–342.
- Becattini, G. (1989), *Modelli locali di sviluppo*, Bologna: Il Mulino.
- Belussi, F., Gottardi, G., Rullani, E. (eds) (2003), *The Technological Evolution of Industrial Districts*, Dordrecht: Kluwer.
- Belussi, F., Pilotti, L. (2002), Knowledge creation, learning and innovation in Italian industrial districts, *Geographiska Annales*, **84B**, 125–139.
- Bisogno, P. (ed.) (1988), *La politica scientifica in Italia negli ultimi 40 anni. Risorse, problemi, tendenze e raffronti internazionali*, Rome: CNR-ISRDS.
- Boschma, R.A. (2005), Proximity and innovation: a critical assessment, *Regional Studies*, **39**, 61–74.
- Boschma, R.A., Frenken, K. (2006), Why is economic geography not an evolutionary science? Towards an evolutionary economic geography, *Journal of Economic Geography*, **6**, 273–302.
- Breschi, S., Malerba, F. (eds) (2005), *Clusters, Networks and Innovation*, Oxford, UK: Oxford University Press.
- Bresnahan, T., Gambardella, A. (eds) (2004), *Building High-tech Clusters. Silicon Valley and Beyond*, Cambridge, UK: Cambridge University Press.
- Bresnahan, T., Gambardella, A., Saxenian, A. (2001), Old economy inputs for new economy outputs: cluster formation in the new Silicon Valleys, *Industrial Corporate Change*, **10**, 835–860.
- Broadberry, S.N. (1993), Manufacturing and the convergence hypothesis: what the long-run data show, *Journal of Economic History*, **53**, 531–558.
- Broadberry, S.N. (1996), Convergence: what the historical record

- shows, in Ark, B. van, Crafts, N.F.R. (eds), *Quantitative Aspects of Post-War European Economic Growth*, Cambridge, UK: Cambridge University Press, pp. 327–347.
- Brusco, S. (1982), The Emilian model: productive decentralization and social integration, *Cambridge Journal of Economics*, **6**, 167–184.
- Bursi, T. (1984), *Il settore meccano-ceramico nel comprensorio della ceramica. Struttura e processi di crescita*, Milan: Franco Angeli.
- Caballero, R.J., Hammour, M.L. (1997), Jobless growth: appropriability, factor substitution, and unemployment, NBER Working Paper Series, 6221.
- Cacace, N. (1970), *Innovazione dei prodotti nell'industria italiana*, Milan: Franco Angeli.
- Cacace, N., Gardin, P. (1968), *Produttività e divario tecnico*, Milan: Franco Angeli.
- Cantwell, J. (2002), *The US Patent Database, 1950–1995*, mimeo.
- Cantwell, J., Iammarino, S. (2003), *Multinational Corporations and European Regional Systems of Innovation*, London: Routledge.
- Carlesi, A., Lanzara, R., Sbrana, R. (1983), *L'apertura dell'industria ai mercati internazionali. Tendenze e problemi nei settori del mobile, della carta e delle macchine per il legno*, Milan: Franco Angeli.
- Carlsson, B., Jacobsson, S. (1991), What makes the automation industry strategic? *Economics of Innovation and New Technology*, **1**, 4.
- Chandler, A.D. (1962), *Strategy and structure: Chapters in the History of the Industrial Enterprise*, Cambridge, MA: MIT Press.
- Chandler, A.D. (1977), *The Visible Hand: The Managerial Revolution in American Business*, Cambridge, MA: The Belknap Press of Harvard University Press.
- Chandler, A.D. (1990), *Scale and Scope: The Dynamics of Industrial Capitalism*, Cambridge, MA: The Belknap Press of Harvard University Press.
- Chandler, A.D., Amatori, F., Hikino, T. (eds) (1999), *Big Business and the Wealth of Nations*, Cambridge, UK: Cambridge University Press.
- Chesbrough, H. (2003), *Open Innovation. The New Imperative for Creating and Profiting From Technology*, Boston, MA: Harvard Business School Press.
- Chesbrough, H., Vanhaverbeke, W., West, J. (2006), *Open*

- Innovation: Researching a New Paradigm*, Oxford, UK: Oxford University Press.
- Christensen, L.R., Cummings, D., Jorgenson, D.W. (1980), Economic growth, 1947–1973: an international comparison, in Kendrick, J.W., Vaccara, B.N. (eds), *New Developments in Productivity Measurement and Analysis*, NBER Conference Report, Chicago, IL: University of Chicago Press.
- Ciccone, A., Matsuyama, K. (1996), Start-up costs and pecuniary externalities as barriers to economic development, *Journal of Development Economics*, **49**, 33–59.
- Ciocca, P., Toniolo, G. (eds) (1999), *Storia economica d'Italia*, vol. I, *Interpretazioni*; vol. II, *Annali*, Roma-Bari: Laterza.
- Cohen, W.M., Levinthal, D.A. (1989), Innovation and learning: the two faces of R&D, *Economic Journal*, **99**, 569–596.
- Cohen, W.M., Levinthal, D.A. (1990), Absorptive capacity: a new perspective on learning and innovation, *Administrative Science Quarterly*, **35**, 128–152.
- Cozzi, T. (1979), *Teoria dello sviluppo economico*, Bologna: Il Mulino.
- Crafts, N.F.R., Toniolo, G. (eds) (1996), *Economic Growth in Europe Since 1945*, Cambridge, UK: Cambridge University Press.
- Crepon B., Duguet E., Mairesse J. (1998), Research, innovation and productivity: an econometric analysis at the firm level, *Economics of Innovation and New Technology*, **7**, 115–158.
- David, P.A. (1975), *Technical Choice Innovation and Economic Growth*, Cambridge, UK: Cambridge University Press.
- David, P.A. (1993), Knowledge property and the system dynamics of technological change, *Proceedings of the World Bank Annual Conference on Development Economics*, Washington, DC: The World Bank.
- David, P.A. (1994), Why are institutions the ‘carriers of history’? Path dependence and the evolution of conventions, organizations and institutions, *Structural Change and Economic Dynamics*, **5**, 205–220.
- David, P.A. (2001), Path dependence, its critics, and the quest for ‘Historical Economics’, in Garrouste, P., Ioannidis, S. (eds), *Evolution and Path Dependence in Economic Ideas: Past and Present*, Cheltenham, UK: Edward Elgar.
- David, P.A. (2004), The tale of two traverses. Innovation and accumulation in the first two centuries of US economic growth, SIEPR Discussion Paper No. 03-24, Stanford University.

- David, P.A. (2007), Path dependence: a foundational concept for historical social science, *Cliometrica. Journal of Historical Economics and Econometric History*, **1**, 91–114.
- David, P.A., Foray, D., Dalle, J.M. (1995), Marshallian externalities and the emergence and spatial stability of technological enclaves, *Economics of Innovation and New Technology*, **6**, 147–182.
- David, P.A., Rosenbloom, J.L. (1990), Marshallian factor market externalities and the dynamics of industrial localization, *Journal of Urban Economics*, **28**, 349–370.
- D'Ignazio, A., Giovannetti, E. (2006), From exogenous to endogenous economic networks: internet applications, *Journal of Economic Survey*, **20**, 757–796.
- Dollar, D., Wolff, E.N. (1988), Convergence of industry labor productivity among advanced economies, 1963–1982, *The Review of Economics and Statistics*, **70**, 4.
- Dougherty, C. (1991), A comparison of productivity and economic growth in the G7 countries, Doctoral Thesis, Harvard University.
- Durlauf, S.N. (2005), Complexity and empirical economics, *Economic Journal*, **115**, 225–243.
- Durlauf, S., Johnson, P.A. (1992), Local versus global convergence across national economies, Working paper No. 3996 of the N.B.E.R., Cambridge.
- Edquist, C. (ed.) (1997), *Systems of Innovation: Technologies, Institutions, and Organizations*, London: Pinter.
- Fagerberg, J. (1987), A technology gap approach to why growth rates differ, *Research Policy*, **16**, 2–4.
- Feldman, M.P. (1999), The new economics of innovation spillovers and agglomeration: a review of empirical studies, *Economics of Innovation and New Technology*, **8**, 5–26.
- Fellner, W. (1961), Two propositions in the theory of induced innovation, *Economic Journal*, **71**, 305–308.
- Foss, N. (1997), *Resources, Firms and Strategies. A Reader in the Resource-based Perspective*, Oxford, UK: Oxford University Press.
- Foss, N.J. (1998), The resource-base perspective: an assessment and diagnosis of problems, *Scandinavian Journal of Management*, **15**, 1–15.
- Freeman, C. (1991), Networks of innovators: a synthesis of research issues, *Research Policy*, **20**, 499–514.
- Freeman, C. (1997), The 'national system of innovation' in historical perspective, in Archibugi, D., Michie, J. (eds), *Technology*

- Globalization and Economic Performance*, Cambridge, UK: Cambridge University Press, pp. 24–49.
- Frenken, K. (2006), Technological innovation and complexity theory, *Economics of Innovation and New Technology*, **15**, 137–155.
- Fuà, G. (1983), Industrializzazione nel Nord Est e nel Centro, in Fuà, G., Zacchia, C. (eds), *Industrializzazione senza fratture*, Bologna: Il Mulino.
- Giannetti, R., Pastorelli, S. (2007), Il sistema nazionale di innovazione negli anni Cinquanta e Sessanta, in Antonelli, C. et al. (eds), *Innovazione tecnologica e sviluppo industriale nel secondo dopoguerra*, Rome: Collana Storica della Banca d'Italia, Laterza.
- Golinelli, R. (1998), La ricostruzione dei dati di contabilità nazionale. Metodi e confronti, mimeo, Università di Bologna.
- Gomellini, M., Pianta, M. (2007), Commercio con l'estero e tecnologia in Italia negli anni Cinquanta e Sessanta, in Antonelli, C. et al. (eds), *Innovazione tecnologica e sviluppo industriale nel secondo dopoguerra*, Rome: Collana Storica della Banca d'Italia, Laterza.
- Greene, W.H. (1997), *Econometric Analysis*, Upper Saddle River, NJ: Prentice Hall.
- Griffith, R., Redding, S., Van Reenen, J. (2003), R&D and absorptive capacity: theory and empirical evidence, *Scandinavian Journal of Economics*, **105**, 99–118.
- Griliches, Z. (1979), Issues in assessing the contribution of research and development to productivity growth, *Bell Journal of Economics*, **10**, 92–116.
- Griliches, Z. (1992), The search for R&D spillovers, *Scandinavian Journal of Economics*, **94**, 29–47.
- Grossman, G.M., Helpman, E. (1994), Endogenous innovation in the theory of growth, *Journal of Economic Perspectives*, **8**, 23–44.
- Guiso, L., Schivardi, F. (2007), Spillovers in industrial districts, *Economic Journal*, **117**, 68–93.
- Hayek, F.A. (1945), The use of knowledge in society, *American Economic Review*, **35**, 519–530.
- Hicks, J.R. (1932), *The Theory of Wages*, London: Macmillan.
- ISCO (1977), *Analisi dell'interscambio commerciale con l'estero. 1952–1976*, Rome: ISCO.
- Istat (1950–72), *Annuario statistico dell'istruzione italiana*, Rome: Istituto poligrafico dello Stato.
- Istat (1950–87), *Statistica annuale del commercio con l'estero*, Rome: Istat.

- Istat (1951–98), *Annuario statistico italiano*, Rome: Istat.
- Istat (1973–98), *Annuario statistico dell'istruzione*, Rome: Istat.
- Istat (1978–85), *Indagine statistica sulla ricerca scientifica*, in Bollettino mensile di statistica. Supplemento.
- Istat (1987), *Indagine sulla diffusione della innovazione tecnologica nell'industria manifatturiera italiana*, Collana d'Informazione, Rome: Istat.
- Istat (1989), *Indagine statistica sull'innovazione tecnologica nell'industria italiana*, Collana d'Informazione, Rome: Istat.
- Istat (1995), *Indagine sull'innovazione tecnologica. Anni 1990–92*, Rome: Istat.
- Jaffe, A.B. (1986), Technological opportunity and spillover of R&D: evidence from firms' patents, profits and market value, *American Economic Review*, **79**, 985–1001.
- Jones, C.I. (2002), *Introduction to Economic Growth*, 2nd edition, New York: Norton.
- Kaldor, N. (1972), The irrelevance of equilibrium economics, *Economic Journal*, **82**, 1237–1255.
- Kaldor, N. (1981), The role of increasing returns technical progress and cumulative causation, *Economie Appliquée*, **34**, 593–617.
- Kennedy, C. (1964), Induced bias and the theory of distribution, *Economic Journal*, **74**, 541–547.
- Kleinknecht, A.H., van Montfort, K., Brouwer, E. (2002), The non-trivial choice between innovation indicators, *Economics of Innovation and New Technology*, **11**, 109–121.
- Lane, D. (2002), Complexity and local interactions. Towards a theory of industrial districts, in Quadrio Curzio, A., Fortis, M. (eds), *Complexity and Industrial Clusters: Dynamics and Models in Theory and Practice*, Berlin: Springer Verlag, pp. 65–82.
- Lane, D.A., Maxfield, R. (1997), Foresight complexity and strategy, in Arthur, W.B., Durlauf, S.N., Lane, D.A. (eds), *The Economy as an Evolving Complex System II*, Santa Fe, NM: Westview Press, pp. 169–198.
- Lane, D. et al. (2009), *Complexity Perspectives in Innovation and Social Change*, Berlin: Springer.
- Maddison, A. (1995), *Monitoring the World Economy, 1820–1992*, Paris: Development Centre of the Organisation for Economic Co-operation and Development.
- Maddison, A. (1996), Macroeconomic accounts for European countries, in Ark, B. van, Crafts, N.F.R. (eds), *Quantitative*

- Aspects of Post-war European Economic Growth*, Cambridge, UK: Cambridge University Press, pp. 27–83.
- Malerba, F. (1988), R&D growth in Italian industry in an international perspective, CESPRI Working Papers, No. 8, Università Commerciale L. Bocconi, Milan.
- Malerba, F. (2005), Sectoral systems of innovation: a framework for linking innovation to the knowledge base, structure and dynamics of sectors, *Economics of Innovation and New Technology*, **14**, 63–82.
- Malerba, F., Torrisci, S., Bussolati, C. (1996), L'evoluzione delle industrie ad alta tecnologia in Italia: entrata tempestiva, declino e opportunità di recupero, Bologna: Il Mulino.
- Mansfield, E., Schwartz, M., Wagner, S. (1981), Imitation costs and patents: an empirical study, *Economic Journal*, **91**, 907–918.
- March, J.C. (1991), Exploration and exploitation in organizing learning, *Organization Science*, **2**, 71–87.
- Marshall, A. (1890 [1920]), *Principles of Economics*, 8th edition, London: Macmillan.
- Martin, R.L. (1999), The new geographical turn in economics: some critical reflections, *Cambridge Journal of Economics*, **23**, 65–91.
- Martin, R. (2007), The localization of industry, in Raffaelli, T., Becattini, G., Dardi, M. (eds), *The Elgar Companion to Alfred Marshall*, Cheltenham, UK: Edward Elgar, pp. 393–400.
- Marx, K. (1867 [1976]), *Capital: A Critique of Political Economy*, Harmondsworth, UK: Penguin Books.
- Matsuyama, K. (1995), Complementarities and cumulative processes in models of monopolistic competition, *Journal of Economic Literature*, **33**, 701–729.
- Mazzoleni, R. (1999), Innovation in the machine tool industry: a historical perspective on the dynamics of comparative advantage, in Mowery, D.C., Nelson, R.R. (eds), *Sources of Industrial Leadership: Studies of Seven Industries*, Cambridge, UK: Cambridge University Press, pp. 169–216.
- Meade, J.E. (1952), External economies and diseconomies in a competitive situation, *Economic Journal*, **62**, 54–67.
- Milgrom, P., Roberts, J. (1995), Complementarities and fit. Strategy structure and organizational change in manufacturing, *Journal of Accounting and Economics*, **19**, 179–208.
- Moon, H., Perron, B. (2008), Seemingly unrelated regressions, in *The New Palgrave Dictionary of Economics*, 2nd edition, Basingstoke, UK: Palgrave MacMillan.

- Nardozzi, G. (1974), Struttura industriale e accumulazione del capitale in Italia, *L'Industria*, 5–6.
- O'Brien, P.K., Prados de La Escosura, L. (1992), Agricultural productivity and European industrialization, 1890–1980, *The Economic History Review*, **45**.
- Nelson, R.R. (1959), The simple economics of basic scientific research, *Journal of Political Economy*, **67**, 297–306.
- Nelson, R.R. (1982), The role of knowledge in R&D efficiency, *Quarterly Journal of Economics*, **97**, 453–470.
- Nelson, R.R. (ed.) (1993), *National Systems of Innovation*, Oxford, UK: Oxford University Press.
- Nelson, R.R., Winter S.G. (1982), *An Evolutionary Theory of Economic Change*, Cambridge, MA: The Belknap Press of Harvard University Press.
- Onida, F. (1978), *Industria italiana e commercio internazionale*, Bologna: Il Mulino.
- Onida, F., Malerba, F. (eds) (1990), *La ricerca scientifica*, Rome: SIPI.
- Organisation for Economic Co-operation and Development (OECD) (2000), Main Science and Technology Indicators, STI-EAS Division, Paris.
- Ostrom, E. (2010), Beyond markets and states: polycentric governance of complex economic systems, *American Economic Review*, **100**, 641–672.
- Paci, R., Pusceddu, N. (2000), Stima dello stock di capitale nelle regioni italiane, *Rassegna Economica, Quaderni di Ricerca*, 97–118.
- Paci, R., Saba, A. (1998), The empirics of regional economic growth in Italy 1951–93, *Rivista Internazionale di Scienze Economiche e Commerciali*, **45**, 515–542.
- Paci, R., Sassu, A., Usai, S. (1997), International patenting and national technological specialization, *Technovation*, **17**, 25–38.
- Parisi, M.L., Schiantarelli, F., Sembenelli, A. (2006), Productivity innovation and R&D: microevidence for Italy, *European Economic Review*, **50**, 2037–2061.
- Parolini, C. (1991), *Le imprese ad alta tecnologia*, Milan: Franco Angeli.
- Pastor-Satorras, R., Vespignani, A. (2004), *Evolution and Structure of the Internet*, Cambridge, UK: Cambridge University Press.
- Patel, P., Pavitt, K. (1994), National innovation systems: why they are important and how they might be measured and compared, *Economics of Innovation and New Technology*, **3**, 77–95.

- Patrucco, P.P. (2003), Institutional variety, networking and knowledge exchange: communication and innovation in the case of the Brianza technological district, *Regional Studies*, **37**, 159–172.
- Patrucco, P.P. (2005), The emergence of technology systems: knowledge production and distribution in the case of the Emilian plastics district, *Cambridge Journal of Economics*, **29**, 37–56.
- Patrucco, P.P. (2009), Collective knowledge production, costs and the dynamics of technological systems, *Economics of Innovation and New Technology*, **18**, 295–310.
- Penrose, E.T. (1959 [1995]), *The Theory of the Growth of the Firm*, 1st and 3rd editions, Oxford, UK: Basil Blackwell (1959) and Oxford University Press (1995).
- Prodi, R. (1966), *Modello di sviluppo di un settore in rapida crescita: L'industria della ceramica per l'edilizia*, Milan: Franco Angeli.
- Prometeia (2003), Banca Dati Regionale, mimeo, Bologna, April.
- Quatraro, F. (2006), Technological change and productivity growth in Italian regions, 1982–2001, *Région et Développement*, **24**.
- Ricerche e Studi (R&S) (1970), *L'industria chimica*, Milan: Capriolo.
- Romer, P.M. (1986), Increasing returns and long-run economic growth, *Journal of Political Economy*, **94**, 1002–1037.
- Romer, P.M. (1990), Endogenous technological change, *Journal of Political Economy*, **98**, S71–102.
- Rosenberg, N. (1963), Technical change in the machine tool industry: 1840–1910, *Journal of Economic History*, **23**, 4.
- Rosenberg, N. (1982), *Inside the Black Box*, Cambridge, UK: Cambridge University Press.
- Rosenberg, N., Mowery, D.C. (1998), *Paths of Innovation: Technological Change in 20th Century America*, Cambridge, UK: Cambridge University Press.
- Rosenstein Rodan, P.N. (1943), Problems of industrialization of Eastern and Southern-Eastern Europe, *Economic Journal*, **53**, 202–211.
- Rossi, N., Sorgato, A., Toniolo, G. (1993), I conti economici italiani: una ricostruzione statistica, 1890–1990, *Rivista di Storia economica*, **X**, 1.
- Rossi, N., Toniolo, G. (1996), Italy, in Crafts, N.F.R., Toniolo, G. (eds), *Economic Growth in Europe Since 1945*, Cambridge, UK: Cambridge University Press.
- Rossi, S. (2003), *La nuova economia. I fatti dietro il mito*, Bologna: Il Mulino.

- Russo, M. (1985), Technical change and the industrial district: the role of interfirm relations in the growth and transformation of ceramic tile production in Italy, *Research Policy*, **14**, 329–343.
- Russo, M. (2000), Complementary innovations and generative relationships: an ethnographic study, *Economics of Innovation and New Technology*, **9**, 517–557.
- Ruttan, V.W. (1997), Induced innovation evolutionary theory and path dependence: sources of technical change, *Economic Journal*, **107**, 1520–1529.
- Salter, W.E.G. (1966), *Productivity and Technical Change*, Cambridge, UK: Cambridge University Press.
- Samuelson, P. (1965), A theory of induced innovation along Kennedy, Weisacker lines, *Review of Economics and Statistics*, **47**, 343–356.
- Scarda, A.M., Sirilli, G. (1982), Technology transfer and technological balance of payments, Quaderni CNR-ISRDS, No. 10.
- Schmookler, J. (1966), *Invention and Economic Growth*, Cambridge, MA: Harvard University Press.
- Schumpeter, J.A. (1911 [1934]), *The Theory of Economic Development*, Cambridge, MA: Harvard University Press.
- Schumpeter, J.A. (1942), *Capitalism, Socialism and Democracy*, New York: Harper and Brothers.
- Schumpeter, J.A. (1947), The creative response in economic history, *Journal of Economic History*, **7**, 149–159.
- Scitovsky, T. (1954), Two concepts of external economies, *Journal of Political Economy*, **62**, 143–151.
- Scott, A.J., Storper, M. (2007), Regions globalization development, *Regional Studies*, **41**, S191–S205.
- Solow, R.M. (1957), Technical change and the aggregate production function, *Review of Economics and Statistics*, **39**, 312–320.
- SVIMEZ (1996), La politica per l'unificazione economica dell'ultimo cinquantennio e i problemi di oggi, Collana SVIMEZ, Bologna: Il Mulino, December.
- Sylos Labini, P. (1967), Prezzi, distribuzione e investimenti in Italia dal 1951 al 1966: uno schema interpretativo, *Moneta e Credito*, **XX**, 79.
- Sylos Labini, P. (1972), Investimenti, produttività e politica finanziaria, in Sylos Labini, P., *Sindacati, inflazione e produttività*, Roma-Bari: Laterza.
- Teece, D. (1986), Profiting from technological innovation: implications for integration, collaboration, licensing and public policy, *Research Policy*, **15**, 285–305.

- Teece, D.J. (1998), Capturing value from knowledge assets: the new economy, markets for know-how and intangible assets, *California Management Review*, **40**, 55–79.
- Teece, D.J. (2000), *Managing Intellectual Capital*, Oxford, UK: Oxford University Press.
- United States Patent and Trademark Office (USPTO) (2001), *Utility Patents in the TAF Database – PATSIC file*, CD-ROM.
- Vasta, M. (1999), *Capitale umano e ricerca scientifica e tecnologica*, in Amatori, F., Bigazzi, D., Giannetti, R., Segreto, L. (eds), *Storia d'Italia. Annali*, vol. XV, *L'industria*, Torino: Einaudi.
- Verspagen, B. (1996), Technology indicators and economic growth in the European area: some empirical evidence, in Ark, B. van, Crafts, N.F.R. (eds), *Quantitative Aspects of Post-war European Economic Growth*, Cambridge, UK: Cambridge University Press, pp. 215–243.
- Viner, J. (1931), Costs curves and supply curve, *Zeitschrift für Nationalökonomie*, **3**, 23–46.
- Von Hippel, E. (1988), *The Sources of Innovation*, Oxford, UK: Oxford University Press.
- Von Hippel, E. (2005), *Democratizing Innovation*, Cambridge, MA: MIT Press.
- Weitzman, M.L. (1996), Hybridizing growth theory, *American Economic Review*, **86**, 207–212.
- Weitzman, M.L. (1998), Recombinant growth, *Quarterly Journal of Economics*, **113**, 331–360.
- Williamson, O.E. (1996), *The Mechanisms of Governance*, New York: Oxford University Press.
- Wolff, E.N. (1985), Industrial composition, interindustry effects, and the US productivity slowdown, *Review of Economics and Statistics*, **67**, 2.
- Wolff, E.N. (1991), Capital formation and productivity convergence over the long term, *American Economic Review*, **81**, 3.
- Young, A.A. (1928), Increasing returns and economic progress, *Economic Journal*, **38**, 527–542.
- Zamagni, V. (1990), *Dalla periferia al centro. La seconda rinascita economica dell'Italia, 1861–1990*, Bologna: Il Mulino.
- Zamagni, V. (1991), L'industria chimica in Italia dalle origini agli anni '50, in Amatori, F., Bezza, B. (eds), *Montecatini 1888–1966. Capitoli di storia di una grande impresa*, Bologna: Il Mulino.
- Zamagni, V. (2010), *L'industria chimica italiana e l'IMI*, Bologna: Il Mulino.

- Zeitlin, J., Herrigel, G. (eds) (1999), *Americanization and its Limits: Reworking US Technology and Management in Postwar Europe and Japan*, Oxford, UK: Oxford University Press.
- Zellner, A. (1962), An efficient method of estimating seemingly unrelated regressions and tests for aggregation bias, *Journal of the American Statistical Association*, **57**, 298.