

References

- Aboites, J., and M. Cimoli (2002), 'Intellectual property rights and national innovation systems: some lessons from the Mexican experience', *Revue d'économie industrielle*, **99**, 15–233.
- Abramovitz, M. (1986), 'Catching up, forging ahead and falling behind', *Journal of Economic History*, **46**, 385–406.
- Abramovitz, M. (1989), *Thinking about growth*, Cambridge: Cambridge University Press.
- Achiladellis, B. and N. Antonakis (2001), 'The dynamics of technological innovation: the case of the pharmaceutical industry', *Research Policy*, **30**, 535–88.
- Adler, E. (1987), *The power of ideology: the quest for technological autonomy in Argentina and Brazil*, Berkeley: University of California Press.
- Aghion, P., E. Caroli, and C. García-Peñalosa (1999), 'Inequality and economic growth: the perspective of the new growth theories', *Journal of Economic Literature*, **37**(4), 1615–60.
- Aghion, P., M. Dewatripont, C. Hoxby, A. Mas-Collell, and A. Sapir (2007), 'Why reform Europe's universities?', Brussels, *Bruegel Policy Brief*, Issue 2007/4.
- Aghion, P., M. Dewatripont, C. Hoxby, A. Mas-Collell, and A. Sapir (2009), *The governance and performance of research universities*, Cambridge, MA, NBER WP 14851.
- Aghion, P., and P. Howitt (1992), 'A model of growth through creative destruction', *Econometrica*, **60**, 323–51.
- Aghion, P., and P. Howitt (2005), 'Appropriate growth policy: a unifying framework', Joseph Schumpeter Lecture.
- Agrawal, A., and I. Cockburn (2003), 'The anchor tenant hypothesis: exploring the role of large, local, R&D intensive firms in regional innovation systems', *International Journal of Industrial Organization*, **21**, 1227–53.
- Aidt, T.S. (2003), 'Economic analysis of corruption', *Economic Journal*, **113**, 632–52.
- Akamatsu, K. (1962), 'A historical pattern of economic growth in developing countries', *Developing Economies*, **1**(1), 3–25.
- Alcorta, L., and W. Peres (1998), 'Innovation systems and technological

- specialization in Latin America and the Caribbean', *Research Policy*, **26**, 857–81.
- Aldrich, H. (1999), *Organizations evolving*, London: Sage.
- Alic, J. (2008), 'A weakness in diffusion: U.S. technology and science policy after World War II', *Technology in Society*, **30**, 17–29.
- Altinok, N., and H. Murseli (2007), 'International database on human capital quality', *Economic Letters*, **96**, 237–44.
- Amable, B., R. Barré, and R. Boyer (1997), *Les systèmes d'innovation à l'ère de la globalisation*, Paris: Economica.
- Amir, S. (2007), 'Nationalistic rhetoric and technological development: the Indonesian aircraft industry in the New Order regime', *Technology in Society*, **29**, 283–93.
- Amsden, A. (1991), 'Diffusion of development: the late-industrializing model and greater East Asia', *American Economic Review*, **81**(2), 282–86.
- Amsden, A.H. (1989), *Asia's next giant: South Korea and late industrialization*, New York, Oxford: Oxford University Press.
- Amsden, A. (2001), *The rise of the rest: challenges to the West from late-industrializing economies*, Oxford: Oxford University Press.
- Anchordoguy, M. (1989), *Computers Inc.: Japan's challenge to IBM*, Cambridge, MA: Harvard University Press.
- Anderson, P.W., K. Arrow, and D. Pines (eds) (1988), *The economy as an evolving complex system*, Boulder, CO: Westview Press.
- Andersson, T., S. Schwaag Serger, J. Sörvik, and E. Wise Hansson (2004), *The cluster policies Whitebook*, Malmo, Sweden: IKED.
- Anwar, M.A. and A.B. Abu Bakar (1997), 'Current state of science and technology in the Muslim world', *Scientometrics*, **40**(1), 23–44.
- Aoki, M. (2007), 'Endogenizing institutions and institutional changes', *Journal of Institutional Economics*, **3**(1), 1–31.
- Archibugi, D., and M. Pianta (1992), 'Specialization and size of technological activities in industrial countries: analysis of patent data', *Research Policy*, **21**, 79–93.
- Arrow, K. (1962), 'Economic welfare and the allocation of resources for invention', in *The rate and direction of economic activity: economic and social facts*, Princeton, NJ: Princeton University Press, pp. 609–25.
- Arthur, W.B. (1994), *Increasing returns and path dependence in the economy*, Ann Arbor: University of Michigan Press.
- Arthur, W.B. (1996), 'Increasing returns and the new world of business', *Harvard Business Review*, July/August.
- Arthur, W.B., S.N. Durlauf, and D.A. Lane (1997), *The economy as an evolving complex system II*, Reading, MA: Perseus.
- Asheim, B., and M. Gertler (2005), 'The geography of innovation: regional

- innovation systems', in J. Fagerberg, D.C. Mowery, and R.R. Nelson (eds), *The Oxford handbook of innovation*, Oxford: Oxford University Press, pp. 291–317.
- Atkinson, R.C., and W. Blanpied (2008), 'Research universities: core of the US science and technology system', *Technology in Society*, **30**, 30–48.
- Axelrod, R., and M. Cohen (2000), *Harnessing complexity: organizational implications of a scientific frontier*, New York: Basic Books.
- Bae, J., and C. Rowley (2004), 'Macro and micro approaches in human resource development: context and content in South Korea', *Journal of World Business*, **39**(4), 349–61.
- Bagnasco, A. (1977), *Tre Italia: la problematica territoriale dello sviluppo italiano*, Bologna: Il Mulino.
- Baldwin, J., W. Chandler, C. Le, and T. Papailiadis (1994), *Strategies for success: a profile of growing small and medium sized enterprises in Canada*, Ottawa, Statistics Canada, Cat. 61–523.
- Balzat, M., and H. Hanusch (2004), 'Recent trends in the research on national innovation systems', *Journal of Evolutionary Economics*, **14**(2), 197–210.
- Barkley Rosser, J., Jr. (ed.) (2003), *Complexity in economics*, Cheltenham, UK: Edward Elgar Publishing.
- Barlatier, J.-P., and C. Thomas (2007), 'Savoir collectif et développement de capacités réseau', *Revue française de gestion*, **170**, 173–90.
- Barro, R. (1991), 'Economic growth in a cross section of countries', *Quarterly Journal of Economics*, **106**(2), 407–43.
- Basalla, G. (1988), *The evolution of technology*, Cambridge: Cambridge University Press.
- Beasley, W. (1995), *Japan encounters the barbarian*, New Haven, CT: Yale University Press.
- Beaudry, C. (2006), 'Enterprise in orbit: the supply of communication satellites', *Economics of Innovation and New Technology*, **15**(7), 679–700.
- Becattini, G. (1990), 'The Marshallian industrial district as a socio-economic notion', in F. Pyke, G. Becattini, and W. Sengenberger (eds), *Industrial districts and interfirm cooperation in Italy*, Geneva: International Institute for Labour Studies, 37–51.
- Becker, G., and K.M. Murphy (1990), 'Human capital, fertility and economic growth', *Journal of Political Economy*, **98**(5), S12–S37.
- Beinhocker, E. (2006), *The origin of wealth: evolution, complexity and radical remaking of economics*, Boston, MA: Harvard Business School Press.
- Belal, A., and I. Springel (2006), 'Research in Egyptian universities: the

- role of research in higher education', UNESCO Forum on Higher Education, Research, and Knowledge, Paris, Nov. 29–Dec. 1.
- Belussi, F., G. Gottardi, and E. Rullani (eds) (2003), *The technological evolution of industrial districts*, Boston: Kluwer.
- Benhabib, J., and M. Siegel (1994), 'The role of human capital in economic development: evidence from aggregate cost-country data', *Journal of Monetary Economics*, **34**, 143–73.
- Benhabib, J., and M. Siegel (2002), 'Human capital and technology diffusion', Discussion Paper, New York University, Department of Economics.
- Bergman, E.M., and E.J. Feser (1999), 'Industry clusters: a methodology and framework for regional development policy in the United States', in OECD, *Boosting innovation: the cluster approach*, Paris, pp. 243–68.
- Bérubé, C., and P. Mohnen (2007), *Are firms that received R&D subsidies more innovative?* Maastricht, Netherlands: MERIT-UNU United Nations University.
- Birch, A. (1997), 'Evaluation of the Danish GTS system', in OECD, *International conference on policy evaluation in innovation and technology*, Paris, Chapter 17.
- Bisang, R. (1995), 'Libre mercado, intervenciones estatales e instituciones de ciencia y técnica en Argentina', *Redes*, **3**(2), 13–58.
- Blomström, M., and A. Kokko (1998), 'Multinational corporations and spillovers', *Journal of Economic Surveys*, **12**(2), 1–31.
- Bloom, D.E., and D. Canning (2000), 'The health and wealth of nations', *Science*, **287**(5456), 1207–9.
- Bloom, N., R. Griffith, and J. Van Reenen (2002), 'Do tax credits work? Evidence from a panel of countries 1979–1997', *Journal of Public Economics*, **85**, 1–31.
- Boekholt, P., and B. Thuriaux (1999), 'Public policies to facilitate clusters: background, rational and policy practices in international perspective', in OECD, *Boosting innovation: the cluster approach*, Paris: OECD Proceedings, pp. 381–412.
- Borrás, S., and D. Tsagdis (2008), *Cluster policies in Europe: firms, institutions and governance*, Cheltenham, UK: Edward Elgar Publishing.
- Boschma, R.A., and M. Sotarauta (2007), 'Economic policy from an evolutionary perspective: the case of Finland', *International Journal of Entrepreneurship and Innovation Management*, **7**(2–5), 156–74.
- Boyce, J. (1993), *The Philippines: the political economy of growth and impoverishment in the Marcos era*, Honolulu, University of Hawaii Press.
- Bozeman, B. (2000), 'Technology transfer and public policy: a review of research and theory', *Research Policy*, **29**, 627–55.

- Braun, M., and R. Di Tella (2004), 'Inflation, inflation variability and corruption', *Economics and Politics*, **16**(1), 77–101.
- Breschi, S., F. Lissoni, and F. Montobbio (2005), 'The geography of knowledge spillovers: conceptual issues and measurement problems', in S. Breschi and F. Malerba (eds), *Clusters, networks and innovation*, New York: Oxford University Press, pp. 343–78.
- Breschi, S., and F. Malerba (1997), 'Sectoral innovation systems: technological regimes, Schumpeterian dynamics, and spatial boundaries', in C. Edquist (ed.), *Systems of innovation*, London: Pinter, pp. 130–56.
- Brock, W.-A., and D. Colander (2000), 'Complexity and policy', in D. Colander (ed.), *The complexity vision and the teaching of economics*, Cheltenham, UK, Edward Elgar Publishing, pp. 73–96.
- Brusco, S. (1986), 'Small firms and industrial districts: the experience of Italy', in D. Keeble and E. Wever (eds), *New firms and regional development in Europe*, London: Croom Helm, 184–202.
- Bruton, H.J. (1998), 'A reconsideration of import substitution', *Journal of Economic Perspectives*, **36**(2), 903–36.
- Bush, V. (1945), *Science, the Endless Frontier, A report to the President of the United States*, Washington, DC: US government Printing Office.
- Caminati, M. (2006), 'Knowledge growth, complexity and the returns to R&D', *Journal of Evolutionary Economics*, **16**, 207–29.
- Canadian Biotechnology Advisory Committee (2001), *Brief history of the Canadian patent system*, Ottawa, available at www.cbac-cccb.ca/epic/site/cbac-cccb.nsf/en/ah00405e.html#historical
- Capron, H., and Bruno van Pottelsberghe de la Potterie (1997), 'Public support for business R&D: a survey and some new quantitative evidence', in OECD, *International conference on policy evaluation in innovation and technology*, Paris, Chapter 10.
- Cardoso, E., and J. Fishlow (1992), 'Latin American economic development, 1950–1980', *Journal of Latin American Studies*, **24**, 197–218.
- Carew, R. (2001), 'Institutional arrangements and public agricultural research in Canada', *Review of Agricultural Economics*, **23**(1), 82–101.
- Carroll, G. (1994), 'A sociological view on why firms differ', in R.P. Rumelt, D. Schendel, and D.J. Teece (eds), *Fundamental issues in strategy*, Boston, MA: Harvard Business School Press, 271–90.
- Carullo, J.C. (1999), *Políticas públicas y el sistema nacional de innovación: el caso argentino*, Quilmes, Universidad de Quilmas. www.innred.net/iber/Eventos/1999/C99_003.htm
- Cassiolato, J., P. Bernardes, and H. Lastres (2002), *Innovation systems in the south: a case study of Embraer*, Vienna, UNCTAD DITE.
- Cassiolato, J., and H. Lastres (1999), 'Inovação, globalização e as novas

- políticas de desenvolvimento industrial e tecnológico', in J. Cassiolato and H. Lastres (eds), *Globalização e inovação localizada*, Brasília: IEL.
- Chandler, A. (1962), *Strategy and structure*, Boston, MA: MIT Press.
- Chandler, A. (1977), *The visible hand*, Cambridge, MA: Belknap Press.
- Chandler, A.D. (2001), *Inventing the electronic century*, New York: Free Press.
- Chang, H.-J. (2003), *Kicking away the ladder: development strategy in historical perspective*, London: Anthem.
- Chang, P.-L., and H.-Y. Shih (2004), 'The innovation systems of Taiwan and China: a comparative analysis', *Technovation*, **24**, 529–39.
- Chen, E. (1997), 'The total factor productivity debate: determinants of economic growth in South East Asia', *Asian Pacific Economic Literature*, **11**(1), 18–38.
- Chiang, J.-T. (1999), 'Defense conversion and systems architecture: challenges to Taiwan's aircraft industry', *Technology in Society*, **21**, 263–74.
- Chong, A., and C. Calderón (2000), 'Causality and feedback between institutional measures and economic growth', *Economics and Politics*, **12**(1), 69–81.
- Chu, P.-Y., Y.L. Lin, H.H. Hsiung, and T.Z. Liu (2006), 'Intellectual capital: an empirical study of ITRI', *Technological Forecasting and Social Change*, **73**, 886–902.
- Chudnovsky, D., and A. Lopez (2007), *The elusive quest for growth in Argentina*, New York: Palgrave Macmillan.
- Chudnovsky, D., J. Niosi, and N. Bercovich (2000), 'Sistemas nacionales de innovación, procesos de aprendizaje y política tecnológica: una comparación de Canadá y Argentina', *Desarrollo Económico*, **40**(158), 213–52.
- Chung, S. (2002), 'Building a national innovation system through regional innovation systems', *Technovation*, **22**, 485–91.
- Cimoli, M. (ed.) (2000), *Developing innovation systems: Mexico in the global context*, London: Continuum/Pinter.
- Clark, C. (1940), *The conditions of economic progress*, London: Macmillan.
- Clark, N., and C. Juma (1987), *Long-run economics: an evolutionary approach to economic change*, London: Pinter.
- Cohen, M.D., R. Burkhart, G. Dosi, M. Egidi, L. Marengo, M. Warglien, and S. Winter (1996), 'Routines and other recurring patterns of organisations: contemporary research issues', *Industrial and Corporate Change*, **5**(3), 653–99.
- Cohen, W., and D.A. Levinthal (1989), 'Innovation and learning: the two faces of R&D', *Economic Journal*, **99**(397), 569–96.

- Cohen, W., and D. Levinthal (1990), 'Absorptive capacity: a new perspective on learning and innovation', *Administrative Science Quarterly*, **35**, 128–52.
- Commission of the European Communities (2008), *The concept of clusters and cluster policies and their role for competitiveness and innovation: main statistical results and lessons learned*, Brussels, COM (2008) 652.
- Cook, B.J. (1999), 'Egyptian higher education: inconsistent cognition', PhD thesis, Faculty of Oriental Studies, University of Oxford.
- Cooke, P. (1992), 'Regional innovation systems: competitive regulation in the new Europe', *Geoforum*, **23**, 365–92.
- Cooke, P. (1996), 'Regional innovation systems: an evolutionary approach', in H. Baraczyk, P. Cooke, and R. Heidenreich (eds), *Regional innovation systems*, London: University of London Press.
- Cooke, P. (2001), 'Regional innovation systems, clusters and the knowledge economy', *Industrial and Corporate Change*, **10**(4), 945–74.
- Cooke, P., M. Gomez Uranga, and G. Etxebarria (1997), 'Regional innovation systems: institutional and organizational dimensions', *Research Policy*, **26**, 475–91.
- Cooke, P., and K. Morgan (1998), *The associational economy: firms, regions and innovation*, Oxford: Oxford University Press.
- Cororaton, C.B. (1999), 'R&D gaps in the Philippines', *Journal of Philippine Development*, **48**(2), 47–66.
- Correa, C. (1998), 'Argentina's national system of innovation', *International Journal of Technology Management*, **15**(6–7), 721–60.
- Cowen, T. (ed.) (1988), *The theory of market failure*, Fairfax, VA: George Mason University Press.
- Crawford, S. and E. Ostrom (1995), 'A grammar of institutions', *American Political Science Review*, **89**(3), 582–600.
- Crow, M., and B. Bozeman (1998), *Limited by design: U.S. laboratories in the national innovation system*, New York: Columbia University Press.
- Cummings, B. (1984), 'The origins and development of the Northeast Asian political economy: industrial sectors, product cycles and political consequences', *International Organization*, **38**(1), 1–40.
- Czarnitzki, D., P. Hanel, and J. Rosa (2004), *Evaluating the impact of R&D tax credits on innovation: a micro-econometric study of Canadian firms*, Centre for European Economic Research, Discussion Paper 04–77.
- David, P. (2000), 'Path dependence, its critics and the search for historical economics', in P. Garrouste and S. Ioannides (eds), *Evolution and path dependence in economic ideas*, Cheltenham, UK, Edward Elgar Publishing.
- David, P.A. (1993), 'Intellectual property institutions and the panda's thumb: patents, copyrights and trade secrets in economic theory and

- history', in M. Wallerstein, M. Moguee, and R. Schoen (eds), *Global dimensions of intellectual property rights in science and technology*, Washington, DC: National Academy Press, pp. 19–61.
- 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**(2), 205–20.
- Davis, J.P., K.M. Eisenhardt, and C.B. Bingham (2007), 'Developing theory through simulation methods', *Academy of Management Review*, **32**(2), 480–99.
- DeBresson, C., and X. Hu (1999), 'Identifying clusters of innovative activity: a new approach and toolbox', in OECD, *Boosting innovation: the cluster approach*, Paris, OECD Proceedings.
- De Britto, C., and L. de Mello (2006), 'Boosting innovation performance in Brazil', Paris, OECD Working Papers No. 532.
- De la Mothe, J., and G. Paquet (eds) (1998), *Local and regional systems of innovation*, Boston, MA: Kluwer.
- De la Peña, F. (2006), *National innovation systems, policy frameworks and programs for the Philippines*, Manila: DOST.
- Del Monte, A., and E. Papagni (2003), 'R&D and the growth of firms: empirical analysis of a panel of Italian firms', *Research Policy*, **32**, 1003–14.
- Deyo, F.C. (1987), *The political economy of the new Asian industrialism*, Ithaca, NY, and London: Cornell University Press.
- Diez, M.A. (2001), 'The evaluation of regional innovation and cluster policies: towards a participatory approach', *European Planning Studies*, **9**(7), 907–24.
- Dietz, T., E. Ostrom, and P.C. Stern (2003), 'The struggle to govern the commons', *Science*, **302**(5652), 1907–12.
- Dobson, I.R., and S. Hölttä (2001), 'The internationalisation of university education: Australia and Finland compared', *Tertiary Education and Management*, **7**, 243–54.
- Dohse, D. (2000), 'Technology policy and the regions – the case of the BioRegio contest', *Research Policy*, **29**, 1111–33.
- Doloreux, D., and S. Parto (2005), 'Regional innovation systems: current discourse and unresolved issues', *Technovation*, **27**, 133–53.
- Dossani, R., and M. Kenney (2002), 'Creating an environment for venture capital in India', *World Development*, **30**(2), 227–53.
- Dunning, J.H. (1998), 'Location and the multinational enterprise: a neglected factor?', *Journal of International Business Studies*, **29**(1), 45–66.
- Ederer, P. (2006), *Innovation at work: the European human capital index*, Brussels, Lisbon Council.

- Edgington, D., and R. Hayter (2000), 'Foreign direct investment and the flying geese model: Japanese electronics firms in the Asia-Pacific', *Environment and Planning A*, **32**, 281–304.
- Edquist, C. (1997), 'Systems of innovation approaches – their emergence and characteristics', in C. Edquist (ed.), *Systems of innovation*, London: Pinter, 1–35.
- Edquist, C. (2005), 'Systems of innovation', in J. Fagerberg, D.C. Mowery, and R.R. Nelson (eds), *The Oxford Handbook of Innovation*, Oxford: Oxford University Press, pp. 181–208.
- Engelstoft, S., C. Jensen-Butler, I. Smith, and L. Winther (2006), 'Industrial clusters in Denmark: theory and empirical evidence', *Papers in Regional Science*, **85**(1), 73–97.
- Enright, M.-J., and B.H. Roberts (2001), 'Regional clustering in Australia', *Australian Journal of Management*, **26**, 65–84.
- Ergas, H. (1987), 'The importance of technology policy', in P. Dasgupta and P. Stoneman (eds), *Economic policy and technological performance*, Cambridge: Cambridge University Press, pp. 51–96.
- Eriksson, S. (1995), 'Global shift in the aircraft industry', PhD thesis, Gothenburg University.
- European Commission (1992, 1996, 2001), *Community innovation survey*, Brussels.
- Fagerberg, J., and M. Godinho (2003), 'Innovation and catching up', in J. Fagerberg, D.C. Mowery, and R.R. Nelson (eds), *The Oxford handbook of innovation*, Oxford: Oxford University Press, 514–42.
- Fagerberg, J., and M. Srholec (2005), 'Catching up: what are the critical factors for success?', Oslo: Background paper for the UNIDO World Industrial Development Report 2005.
- Falk, M. (2004), 'What drives business R&D intensity across OECD countries?', Presentation to DRUID, Aalborg University.
- Falk, M. (2007), 'What determines patents per capita in OECD countries?', *Problems and Perspectives in Management*, **5**(2), 4–18.
- Feldman, E. (1985), *Concorde and dissent: explaining high-technology failures in Britain and France*, Cambridge: Cambridge University Press.
- Feldman, M. (2003), 'The locational dynamics of the U.S. biotech industry: knowledge externalities and the anchor tenant hypothesis', *Industry and Innovation*, **10**(3), 311–28.
- Feldman, M., and D. Audretsch (1999), 'Innovation in cities: science-based diversity, specialization and localized competition', *European Economic Review*, **43**, 409–29.
- Feldman, M., and J. Francis (2003), 'Fortune favours the prepared region: the case of entrepreneurship and the capital region biotechnology cluster', *European Planning Studies*, **11**(7), 765–88.

- Feller, I. (1999), 'The American university system as performer of basic and applied research', in L.M. Branscomb, F. Kodama, and R. Florida (eds), *Industrializing knowledge: university–industry linkages in Japan and the United States*, Boston, MA: MIT Press, pp. 65–101.
- Finland (2003), *Knowledge, innovation and internationalization*, Helsinki: Science and Technology Council of Finland.
- Finland Ministry of Education (2005), *OECD thematic review of tertiary education: country background report for Finland*, Helsinki.
- Finlay, M.R. (1988), 'The German agricultural experimental stations and the beginnings of American agricultural research in the United States: past, present and future', *Agricultural History*, **62**(2), 41–50.
- Fischer, M.M. (ed.) (2001), *Knowledge, complexity and innovation systems*, New York: Springer Verlag.
- Fischer, M.M. (ed.) (2002), *Regional development reconsidered*, New York: Springer Verlag.
- Fogel, R.W. (1990), *The conquest of high mortality and hunger in Europe and America: timing and mechanisms*, Cambridge, MA, NBER Working Paper Series on Historical Factors in Long-Run Growth, WP 16.
- Fogel, R.W. (1999), 'Catching-up with the economy', *American Economic Review*, **89**(1), 1–21.
- Foray, D. (2003), 'Higher education and universities in the knowledge economy of the industrialised world: a general framework', UNESCO Higher Education Forum, Paris.
- Forrester, J. (1971), *World dynamics*, Cambridge: Wright Allen.
- Frank, L. (2001), 'A biotech gambit in the desert', *Science*, **292**(5521), 1478.
- Frantzen, D. (2000), 'R&D, human capital and international technology spillovers: a cross-country analysis', *Scandinavian Journal of Economics*, **102**(1), 57–75.
- Freeman, C. (1987), *Technology policy and economic performance*, London: Pinter.
- Freeman, C. (1988), 'Japan: a new national system of innovation?' in G. Dosi et al. (eds), *Technical change and economic theory*, London: Pinter, pp. 330–48.
- Freeman, C. (1995), 'The national system of innovation in historical perspective', *Cambridge Journal of Economics*, **19**(1), 5–24.
- Freeman, C. (1996), 'Catching-up and falling behind: the case of Asia and Latin America', in J. de la Mothe and G. Paquet (eds), *Evolutionary economics and the new international political economy*, London: Pinter, pp. 160–79.
- Freeman, C. (2002), 'Continental, national and sub-national innovation systems – complementarity and economic growth', *Research Policy*, **31**, 191–231.

- Frenken, K. (2006a), *Innovation, evolution and complexity theory*, Cheltenham, UK, Edward Elgar Publishing.
- Frenken, K. (2006b), 'Technological innovation and complexity theory', *Economics of Innovation and New Technology*, **15**(2), 137–55.
- Galli, R., and M. Teubal (1997), 'Paradigmatic shifts in national innovation systems', in C. Edquist (ed.), *Systems of innovation, technologies, institutions and organizations*, London: Pinter, 342–70.
- Georghiou, L. (1997), 'Issues in the evaluation of innovation and technology policy', in OECD, *International conference on policy evaluation in innovation and technology*, Paris, Chapter 3.
- Georgia Research Alliance (2007), *Annual report*, Atlanta.
- Gil Valdivia, G., and S. Chacon Domínguez (2008), *La crisis del petróleo en México*, México, Foro Consultivo en Ciencia y Tecnología.
- Glasmeier, A.K. (2000), 'Economic geography in practice: local economic development policy', in G.L. Clark et al. (eds), *The Oxford Handbook of Economic Geography*, Oxford: Oxford University Press, pp. 559–79.
- Goh, A.L.S. (2005), 'Promoting innovation in aid of industrial development: the Singaporean experience', *International Journal of Public Sector Management*, **18**(3), 216–40.
- Goldstein, A., and S. McGuire (2004), 'The political economy of strategic trade policy and the Brazil–Canada export subsidies saga', *World Economy*, **27**(4), 541–66.
- Gonda, K., and F. Kakizaki (2001), 'Knowledge transfer in agglomerations: a regional approach to Japanese manufacturing clusters', in OECD, *Innovative clusters: drivers of national innovation systems*, Paris, 289–302.
- Goodman, E. (1989), 'Introduction', in E. Goodman and J. Bamford (eds), *Small firms and industrial districts in Italy*, London: Routledge, 1–30.
- Griliches, Z. (1997), 'Education, human capital and growth: a personal perspective', *Journal of Labour Economics*, **15**(1), S330–S344.
- Guellec, D., and B. Van Pottelsberghe (2003), 'The impact of public R&D expenditure on business R&D', *Economics of Innovation and New Technology*, **12**(3), 225–43.
- Gylfason, T. (2001), 'Natural resources, education and economic development', *European Economic Review*, **45**, 847–59.
- Gylfason, T., and G. Zoega (2006), 'Natural resources and economic growth: the role of investment', *World Economy*, **29**(8), 1091–1116.
- Hall, B. (1992), *R&D tax policy during the eighties: success or failure?*, Cambridge, MA: National Bureau of Economic Research, Working Paper 4240.

- Hall, B. (2002), 'The financing of research and development', *Oxford Review of Economic Policy*, **18**(1), 35–52.
- Hall, B., and J. Van Reenen (2000), 'How effective are fiscal incentives for R&D? A review of the evidence', *Research Policy*, 449–69.
- Han, M.-Y. (1999), *From rice paddles to flat panel displays: an annotated chronology of Korea's science and technology*, Duke University, available at www.duke.edu/~myhan/kaf0401.html
- Harris, J.-R. (1998), *Industrial espionage and technology transfer: Britain and France in the 18th century*, Aldershot, UK: Ashgate.
- Hayek, F. (1973), *Law, legislation and liberty*, Vol. 1, London: Routledge.
- Hays, S.P. (1996), 'Patterns of reinvention: the nature of evolution during policy diffusion', *Policy Studies Journal*, **24**(4), 551–66.
- Hellman, J., and D. Kaufman (2001), 'Confronting the challenge of state capture in transition economies', *Finance and Development*, **38**(3) (IMF quarterly electronic magazine).
- Hirschman, A. (1968), 'The political economy of import substituting industrialisation in Latin America', *Quarterly Journal of Economics*, **82**(1), 1–32.
- Hodgson, G. (1993a), *Economics and evolution*, Ann Arbor: University of Michigan Press.
- Hodgson, G. (ed.) (1993b), *Evolution and institutions*, Cheltenham, UK, Edward Elgar Publishing.
- Hodgson, G. (1999), *Evolution and economics*, Cheltenham, UK, Edward Elgar Publishing.
- Hodgson, G. (2001), *How economics forgot history: the problem of historical specificity in social science*, London: Routledge.
- Hodgson, G. (2009), 'On the institutional foundations of law: the insufficient foundations of custom and private order', *Journal of Economic Issues*, **43**(1), 143–67.
- Holland, S. (ed.) (1972), *The State as Entrepreneur. New Dimensions for Public Enterprise: the IRI State Shareholding Formula*, White Plains, NY: International Arts and Sciences Press.
- Hollanders, H. (2006), *European regional innovation scoreboard (2006 RIS)*, Maastricht, Netherlands, MERIT.
- Hong Kong University of Science and Technology (2002), *Changing education profile of Singapore population*, Conference on Chinese Population and Socio-economic Studies.
- Honkapohja, S., and E. Koskela (1999), 'The economic crisis of the 1990's in Finland', *Economic Policy*, (14), 399–426.
- Horgan, J. (1995), 'From complexity to perplexity', *Scientific American*, June, 104–9.

- Howells, J. (1999), 'Regional systems of innovation', in D. Archibugi, J. Howells, and J. Michie (eds), *Innovation policy in a global economy*, Cambridge: Cambridge University Press, 67–93.
- Hu, T.S., C.Y. Lin, and S.-L. Chang (2005), 'Technology-based regional development strategies and the emergence of regional communities: a case study of HSIP, Taiwan', *Technovation*, **25**, 367–80.
- Hung, S.C., and Y.Y. Chu (2006), 'Stimulating new industries from emerging technologies: challenges for the public sector', *Technovation*, **26**, 104–10.
- Inocentes, A. (2006), *The future of higher education in the Philippines: a presentation to the Asia-Pacific Forum on Education*, Beijing, November 14–17.
- Invest Korea (2006), *R&D human resource development program*, Seoul.
- Islam, N. (2003), 'What have we learnt from the convergence debate?', *Journal of Economic Surveys*, **17**(3), 309–63.
- Jaffe, A., M. Trajtenberg, and R. Henderson (1993), 'Geographic localisation of knowledge spillovers as evidenced by patents', *Quarterly Journal of Economics*, **108**(3), 577–98.
- Jaffe, A.-B. (2002), 'Building policy evaluation into the design of public research support programmes', *Oxford Review of Economic Policy*, **18**(1), 22–35.
- Jain, A.K. (2001), 'Corruption: a review', *Journal of Economic Surveys*, **15**(1), 71–121.
- James, E. (1991), 'Private higher education: the Philippines as a prototype', *Higher Education*, **21**, 189–206.
- Jan, T.-S., and Y. Chen (2006), 'The R&D system for industrial development in Taiwan', *Technological Forecasting and Social Change*, **73**, 559–74.
- Jankowski, J. (2001), 'A brief data-informed history of science and technology policy', in M.P. Feldman and A.N. Link (eds), *Innovation policy in the knowledge-based economy*, Boston, MA: Kluwer, 5–36.
- Janszen, F.H., and G.H. Degenars (1998), 'A dynamic simulation model between the structure and the process of national systems of innovation using computer simulation: the case of Dutch biotechnology', *Research Policy*, **27**, 37–54.
- Japan, METI (2008), *Industrial cluster project*, Tokyo.
- Jauhainen, J.S. (2008), 'Regional and innovation policies in Finland – towards convergence and/or mismatch?' *Regional Studies*, **42**(7), 1–15.
- Jensen, B.E. (2004), 'Clustering in Denmark and Danish cluster policy', Paper for the Nordic Cluster Gathering, August 15–16.
- Jéquier, N. (1974), 'Computers,' in R. Vernon (ed.), *Big business and the state*, Cambridge, MA: Harvard University Press, 195–254.

- Johnson, C. (1982), *MITI and the Japanese miracle. The growth of industrial policy, 1925–1975*, Tokyo: Tuttle & Co.
- JTC (Jurong Town) Corporation (2007), *Biopolis @ one north*, Singapore.
- Kaldor, N. (1970), 'The case for regional policies', *Scottish Journal of Political Economy*, **17**(3), 337–48.
- Kasahara, S. (2004), *The flying geese paradigm: a critical study of its application in Asian regional development*, Vienna, UNCTAD Discussion Paper No. 169.
- Katz, J. (2000), 'The dynamics of technological learning during the import substitution period and recent structural changes in the industrial sector in Argentina, Brazil and Mexico', in L. Kim and R.R. Nelson (eds), *Technology, learning and innovation*, Cambridge: Cambridge University Press, 307–34.
- Katz, J., and C. Contreras (2009), *The dynamics of university behaviour in Chile*, Intelis and Department of Economics, University of Chile, Santiago.
- Kelly, D., and T.-L. Amburgey (1991), 'Organizational inertia and momentum: a dynamic model of strategic change', *Academy of Management Journal*, **34**(3), 591–612.
- Kim, L. (1997a), 'Technology policies and strategies for developing countries: lessons from Korea', *Technology Analysis and Strategic Management*, **10**(3), 311–24.
- Kim, L. (1997b), *Imitation to innovation: the dynamics of Korea's technological learning*, Boston, MA: Harvard Business School Press.
- Kim, L., and R.R. Nelson (eds) (2000), *Technology, learning and innovation: experiences of newly industrialized economies*, Cambridge: Cambridge University Press.
- King, E., and M.A. Hill (1993), *Women's education in developing countries, barriers, benefits and policies*, Baltimore: Johns Hopkins University Press, World Bank Book.
- Klaasen, G., A. Miketa, K. Larsen, and T. Sundqvist (2005), 'The impact of R&D on innovation for wind energy in Denmark, Germany, and the U.K.', *Ecological Economics*, **54**(1–3), 227–40.
- Klepper, S. (1997), 'Industry life cycles', *Industrial and Corporate Change*, **6**(1), 145–81.
- Klepper, S. (2005), 'Entry by spin-offs', *Management Science*, **51**(8), 1291–1306.
- Klepper, S. (2007), 'Disagreements, spin-offs and the evolution of Detroit as the capital of the U.S. automobile industry', *Management Science*, **53**(4), 616–31.
- Knack, S. (1996), 'Institutions and the convergence hypothesis: the cross-national evidence', *Public Choice* **87**, 207–28.

- Kneller, R., and P. Stevens (2006), 'Frontier technology and absorptive capacity: evidence from OECD manufacturing industries', *Oxford Bulletin of Economics and Statistics*, **68**(1), 1–21.
- Koenig, R. (2007), 'Egypt plans a shakeup of research programs', *Science*, **317**(5834), 30.
- Kohtamäki, V., and A. Lyytinen (2004), 'Financial autonomy and challenges to being a regionally responsive higher education institution', *Tertiary Education and Management*, **10**, 319–38.
- Kotilainen, H. (2005), *Implementation of the innovation policy: lessons from Finland*, Presentation to the meeting Linkages between Higher Education, Research and the Business Sector, Riga, Latvia.
- Krueger, A.B., and M. Lindhal (2001), 'Education for growth: why and for whom?', *Journal of Economic Literature*, **39**(4), 1101–36.
- Krugman, P. (1983), 'New theories of trade among industrial countries', *American Economic Review*, **73**(2), 343–7.
- Krugman, P. (1991), *Geography and trade*, Cambridge, MA, MIT Press.
- Krugman, P. (1994), 'Competitiveness: a dangerous obsession', *Foreign Affairs*, **73**(2), 29–44.
- Kuhlmann, S. (1997), 'Evaluation as a medium of science and technology policy: recent developments in Germany and beyond', in OECD, *International conference on policy evaluation in innovation and technology*, Paris, Chapter 25.
- Kumagai, S. (2008), 'A journey through the secret history of the flying geese model', IDE Discussion Paper, JETRO, Chiba, Japan.
- Kumar, N. (2003), 'Intellectual property rights, technology and economic development', *Economic and Political Weekly*, **38**(3), 209–15 and 217–26.
- Kuran, T. (1997), 'Islam and underdevelopment: an old puzzle revisited', *Journal of Institutional and Theoretical Economics*, **153**, 41–72.
- Kuran, T. (2004), 'Why the Middle East is economically underdeveloped: historical mechanisms of institutional stagnation', *Journal of Economic Behavior and Organization*, **18**, 71–90.
- Kushida, K. (2003), 'The political economy of the Philippines under Marcos', *Stanford Journal of East Asian Affairs*, **3**(1), 119–27.
- Kwan, C.H. (2002), 'The rise of China and Asia's Flying Geese Pattern of Economic Development: An empirical analysis based on US import statistics', Tokyo: Nomura Research Institute, NRI Paper N. 52.
- Lall, S. (2000), 'Technological change and industrialization in the Asian newly industrializing economies: achievements and challenges', in L. Kim and R.R. Nelson (eds), *Technology, learning and innovation: experiences of newly industrializing economies*, Cambridge: Cambridge University Press, 13–68.

- Lall, S. (2004), *Reinventing industrial strategy: the role of government policy in building industrial competitiveness*, UNCTAD, Vienna, Discussion Paper Series, No. 24.
- Lampinen, O. (2001), 'The use of experimentation in educational reform: the case of the Finnish polytechnic experiment 1992–1999', *Tertiary Education and Management*, **7**, 311–21.
- Landes, D. (1969), *The unbound Prometheus: technological change and industrial development in western Europe from 1750 to the present*, Cambridge: Cambridge University Press.
- Landes, D. (1972), *The Unbound Prometheus, Technological Change and Industrial Development in Western Europe from 1750 to the Present*, Cambridge, MA: Cambridge University Press.
- Landes, D. (1999), *The wealth and poverty of nations: why some are so rich and some are so poor*, New York: Norton.
- Lazerson, M., and G. Lorenzoni (1999), 'The firms that feed industrial districts: a return to the Italian source', *Industrial and Corporate Change*, **8**(2), 235–66.
- Lazonick, W. (1994), 'Social organization and technological leadership', in W.J. Baumol, R.R. Nelson, and E.N. Wolf (eds), *Convergence of productivity: cross national studies and historical evidence*, Oxford: Oxford University Press, 164–93.
- Lee, K., and C. Lim (2001), 'Technological regimes, catching up and leapfrogging: findings from the Korean industries', *Research Policy*, **30**(3), 459–84.
- Lee, T.-L., and N. von Tunzelmann (2005), 'A dynamic analytic approach to national innovation systems: the IC industry in Taiwan', *Research Policy*, **34**, 425–40.
- Leonard, D. (1996), 'The nature of core capabilities and core rigidities', in *Wellsprings of knowledge: building and sustaining the sources of innovation*, Boston, MA: Harvard Business School Press.
- Li, H.-L., L.C. Xu, and H.-F. Zou (2000), 'Corruption, income distribution and growth', *Economics and Politics*, **12**(2), 155–82.
- Lipsey, R., and K. Carlaw (1998), 'Technology policies in neo-classical and structuralist-evolutionary models', *STI Review*, **22**, 30–73.
- Lipsey, R.G. (2002), 'Some implications of endogenous technical change for technology policy in developing countries', *Economics of Innovation and New Technology*, **11**(4–5), 321–51.
- List, F. (1841), *Das Nationale System der politischen ökonomie* (English translation, London, Longmans, Green & Co., 1909).
- Liu, J.-T, M.-W. Tsou, and J.K. Hammitt (1999), 'Export activity and productivity: evidence from the Taiwanese electronics industry', *Weltwirtschaftliches Archiv*, **135**(4), 675–91.

- Liu, X., and S. White (2001), 'Comparing innovation systems: A framework and application to China's transitional context', *Research Policy*, **30**, 1091–1114.
- Loasby, B. (1999), *Knowledge, institutions and evolution in economics*, London: Routledge.
- Longhi, C. (1999), 'Networks, collective learning and technology development in high-technology regions: the case of Sophia Antipolis', *Regional Studies*, **33**(4), 333–42.
- Lorenz, E. (1994), 'Organizational inertia and competitive decline: the British cotton, shipbuilding and car industries, 1945–1975', *Industrial and Corporate Change*, **3**(2), 379–403.
- Low, L. (1998), 'Science, technology and the state in Singapore: an overview, evaluation and comparison', *Journal of the Asia-Pacific Economy*, **3**(2), 183–206.
- Lundvall, B.-A. (1988), 'Innovation as an interactive process: from user/producer interaction to the national system of innovation', in G. Dosi, C. Freeman, R.R. Nelson, G. Silverberg, and L. Soete (eds), *Technical change and economic theory*, London: Pinter, pp. 349–69.
- Lundvall, B.-A. (ed.) (1992), *National innovation systems*, London: Pinter.
- MacDonald, N. (1988), 'Henry Kaiser and the establishment of an automobile industry in Argentina', *Business History*, **30**(3), 329–45.
- 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**(1), 63–82.
- Malerba, F. (ed.) (2004), *Sectoral systems of innovation*, Cambridge: Cambridge University Press.
- Manasan, R., J.S. Cuenca, and E.C. Villanueva Ruiz (2008), *Benefit incidence of public spending on education in the Philippines*, Malaki City: Philippine Institute for Development Studies, Discussion Paper Series 2008-08.
- Mansfield, E. (1977), *The production and application of new industrial technology*, New York: Norton.
- Marceau, J. (1999), 'The disappearing trick: clusters in the Australian economy', in J. Guinet (ed.), *Boosting innovation: the cluster approach*, OECD, Paris, 155–76.
- March, J., and H. Simon (1993), *Organizations*, 2nd ed., Cambridge, MA: Blackwell.
- Markusen, A. (1996), 'Sticky places in slippery space: a typology of industrial districts', *Economic Geography*, **72**(3), 293–313.
- Marshall, A. (1920), *Principles of economics*, 8th ed., London: Macmillan.

- Marshall, A. (2004), *Labour market policies and regulations in Argentina, Brazil and Mexico: programmes and impacts*, Buenos Aires, CONACYT and IDES, WP 2004/13, prepared for the ILO.
- Martin, R., and P. Sunley (2003), 'Deconstructing clusters: chaotic concept or policy panacea', *Journal of Economic Geography*, **3**, 5–35.
- Maskell, P., and A. Malmberg (2007), 'Myopia, knowledge development and cluster evolution', *Journal of Economic Geography*, **7**(5), 603–19.
- Mauro, P. (1997), *Why worry about corruption?* Washington, DC: IMF Economic Issues.
- Mauro, P. (2004), 'The persistence of corruption and slow economic growth', *IMF Staff Papers*, **51**(1) (electronic document).
- Mayer, D. (2001), 'The long-term impact of health on economic growth in Latin America', *World Development*, **29**(6), 1025–33.
- Mazzoleni, R. (2008), 'Catching up and academic institutions: a comparative study of past national experiences', *Journal of Development Studies*, **44**(5), 678–700.
- McKelvey, M. (1991), 'How do national systems of innovation differ? A critical analysis of Porter, Freeman, Lundvall and Nelson', in G. Hodgson and E. Screpanti (eds), *Rethinking economics*, Cheltenham, UK, Edward Elgar Publishing, 117–37.
- McKelvey, M. (1997), 'Using evolutionary theory to define systems of innovation', in C. Edquist (ed.), *Systems of innovation*, London: Pinter, 200–22.
- Menzel, M.P., and D. Fornahl (2007), *Cluster life cycles – dimensions and rationales of cluster development*, Jena, Jena Economic Research Papers 2007, No. 006.
- Metcalf, J.S. (1995), 'Technology systems and technology policy in an evolutionary framework', *Cambridge Journal of Economics*, **19**, 25–46.
- Metcalf, J.S., and L. Georghiu (1997), *Equilibrium and evolutionary foundations of technology policy*, Manchester, CRIC Discussion Paper No. 3.
- Mexico, Foro consultivo científico y tecnológico (2006a), *Diagnóstico de la política científica, tecnológica y de innovación en México, (2000–2006)*, Mexico DF.
- Mexico, Foro consultivo científico y tecnológico (2006b), *Proyecto: bases para una política de estado en ciencia, tecnología e innovación en México*, Mexico DF.
- Mexico, Foro consultivo científico y tecnológico (2008), *Promoviendo la innovación y el desarrollo tecnológico*, Mexico DF.
- Mitchell, W. (1991), 'Dual clocks: entry order influences on incumbent and newcomer market share and survival when specialized assets retain their value', *Strategic Management Journal*, **12**(2), 85–100.

- Mo, P.H. (2001), 'Corruption and economic growth', *Journal of Comparative Economics*, **29**, 66–79.
- Mohnen, P., and L.H. Röller (2005), 'Complementarities in innovation policy', *European Economic Review*, **49**, 1431–50.
- Mokyr, J. (1990), *The lever of riches: technological creativity and economic progress*, Oxford: Oxford University Press.
- Motohashi, K., and X. Yun (2007), 'China's innovation system reform and growing industry and science linkages', *Research Policy* **36**(8), 1251–1260.
- Moulaison, H.L. (2004), 'Minitel and France's legacy of democratic information access', *Government Information Quarterly*, **21**(91), 99–107.
- Mowery, D. (1998), 'The changing structure of the U.S. national innovation system: implications for international conflict and cooperation in R&D policy', *Research Policy*, **27**(6), 639–54.
- Mowery, D., and N. Rosenberg (1989), *Technology and the pursuit of economic growth*, Cambridge: Cambridge University Press.
- Mowery, D. (ed.) (1996), *The international computer software industry*, Oxford: Oxford University Press.
- Mowery, D., and R. Nelson (eds) (1999), *Sources of Industrial Leadership*, Cambridge, MA: Cambridge University Press.
- Murto, E., M. Niemelä, and T. Laamanen (2006), *Finnish technology policy from the 1960s to the present day*, Helsinki, Ministry of Trade and Industry.
- Myrdal, G. (1957), *Economic theory and underdeveloped regions*, London: Duckworth.
- Mytelka, L., and K. Smith (2002), 'Policy learning and innovation theory: an interactive and co-evolving process', *Research Policy*, **31**, 1467–79.
- National Science Foundation (NSF) (2006), *Science and Engineering indicators*. Washington, DC.
- National Science Foundation (NSF) (2008), *Science and engineering indicators*, Washington, DC.
- Neale, W.C. (1994), 'Institutions', in G.H. Hodgson, W. Samuels, and M.R. Tool (eds), *The Elgar companion to institutional and evolutionary economics*, Cheltenham, UK, Edward Elgar Publishing, 402–6.
- Neill, R. (1999), 'Francis Bacon, John Rae and the economics of competitiveness: capital theory and trade policy', *American Journal of Economics and Sociology*, **58**(3), 385–98.
- Nelson, R.-R. (1983), 'Government support of technical progress: lessons from history', *Journal of Policy Analysis and Management*, **2**(4), 499–514.
- Nelson, R.-R. (1988), 'Institutions supporting technical change in the United States', in G. Dosi et al. (eds), *Technical change and economic theory*, London: Pinter, 312–329.

- Nelson, R.R. (1994a), 'The co-evolution of technology, industrial structure and institutions', *Industrial and Corporate Change*, **3**(1), 47–63.
- Nelson, R.R. (1994b), 'Why do firms differ and how does it matter?' in R.P. Rumelt, D. Schendel, and D.J. Teece (eds), *Fundamental issues in strategy*, Boston, MA: Harvard Business School Press, 247–69.
- Nelson, R.R. (1995), 'Recent evolutionary theorizing about economic change', *Journal of Economic Literature*, **33**(1), 48–90.
- Nelson, R.R. (2003), *Physical and social technologies and their evolution*, Pisa, Sant'Anna School of Advanced Studies, LEM Working Paper Series, 2003/09.
- Nelson, R.R. (2005a), *Technology, institutions and economic growth*, Cambridge, MA: Harvard University Press.
- Nelson, R.R., and E.S. Phelps (1966), 'Investment in humans, technological diffusion and economic growth', *American Economic Review Proceedings*, **56**, 69–75.
- Nelson, R.R., and N. Rosenberg (1994), 'American universities and technical advance in industry', *Research Policy*, **23**(3), 323–48.
- Nelson, R.R., and B. Sampat (2001), 'Making sense of institutions as a factor shaping economic performance', *Journal of Economic Behavior and Organization*, **44**, 31–54.
- Nelson, R.R., and S. Winter (1982), *An evolutionary theory of economic change*, Cambridge, MA: Belknap Press of Harvard University Press.
- Nelson, R.R. (ed.) (1993), *National innovation systems*, New York: Oxford University Press.
- Nelson, R.R. (ed.) (2005b), *The limits of market organization*, New York: Russell Sage Foundation.
- Niosi, J. (1999), 'The diffusion of organizational routines', in J. Groenewegen et al. (eds), *Institutions and the evolution of capitalism*, Cheltenham, UK, Edward Elgar Publishing, pp. 109–22.
- Niosi, J. (2000a), *Canada's national system of innovation*, Montreal: McGill-Queen's University Press.
- Niosi, J. (2000b), 'Science-based industries: a new Schumpeterian taxonomy', *Technology in Society*, **22**(3), 429–44.
- Niosi, J. (2001), *Regional systems of innovation: an evolutionary approach*, Presentation to the Annual Congress of EAEPE, Sienna, Nov. 8–11.
- Niosi, J. (2002), 'National systems of innovation are x-efficient (and x-effective): why some are slow learners', *Research Policy*, **31**(2), 291–302.
- Niosi, J. (2003), 'Alliances are not enough: explaining rapid growth in Canadian biotechnology', *Research Policy*, **32**(5), 737–50.
- Niosi, J. (2005), *Canada's regional innovation systems: the science-based industries*, Montreal: McGill-Queen's University Press.

- Niosi, J., and M. Banik (2005), 'The evolution and performance of biotechnology regional systems of innovation', *Cambridge Journal of Economics*, **29**, 343–57.
- Niosi, J., and T.G. Bas (2001), 'The competencies of regions: Canada's clusters in biotechnology', *Small Business Economics*, **17**, 31–42.
- Niosi, J., and T.G. Bas (2004), 'Canadian biotechnology policy: designer incentives for a new technology', *Environment and Planning, C*, **22**(2), 233–48.
- Niosi, J., and B. Bellon (1994), 'The global interdependence of national innovation systems: evidence, limits and implications', *Technology in Society*, **16**(2), 173–98.
- Niosi, J., B. Bellon, P.P. Saviotti, and M. Crow (1993), 'National systems of innovation: in search of a workable concept', *Technology in Society*, **15**(2), 207–27.
- Niosi, J., and M. Bourassa (2008), 'L'innovation dans les villes canadiennes', in Institut de la Statistique du Québec: *Compendium 2008*, Québec City, 47–56.
- Niosi, J., and S. Reid (2007), 'Biotechnology and nanotechnology: science-based industries as windows of opportunity for developing countries?' *World Development*, **36**(3), 426–38.
- Niosi, J., and T. Tschang (2009), 'The strategies of Chinese and Indian software multinationals: implications for internationalisation theory', *Industrial and Corporate Change*, **18**(2), 269–94.
- North, D. (1981), *Structure and change in economic history*, New York: Norton.
- North, D. (1990), *Institutions, institutional change and economic performance*, Cambridge: Cambridge University Press.
- North, D. (1993), *The new institutional economics and development*, St Louis, MO: Washington University Working Paper.
- North Carolina Board of Science and Technology (2000), *High-tech clusters in North Carolina*, Raleigh.
- Noteboom, B. (1997), 'Path dependence of knowledge: implications for the theory of the firm', in L. Magnusson and J. Ottosson (eds), *Evolutionary economics and path dependence*, Cheltenham, UK, Edward Elgar Publishing, 57–78.
- Nye, J.V. (1991), 'The myth of free trade Britain and fortress France: tariffs and trade in the 19th century', *Journal of Economic History*, **51**(1), 23–46.
- Odagiri, H. (1999), 'University–industry collaboration in Japan: facts and interpretation', in L.M. Branscomb, F. Kodama, and R. Florida (eds), *Industrializing knowledge: university – industry linkages in Japan and the United States*, Boston, MA: MIT Press, 252–65.

- Odagiri, H., and A. Goto (1996), *Technology and industrial development in Japan*, New York: Oxford University Press.
- Okimoto, D. (1989), *Between MITI and the market: Japanese industrial policy for high technology*, Stanford, CA: Stanford University Press.
- OECD (1997a), *International conference on policy evaluation in innovation and technology*, Paris.
- OECD (1997b), *National innovation systems*, Paris.
- OECD (1999a), *Boosting innovation: the cluster approach*, Paris, OECD Proceedings.
- OECD (1999b), *Managing national innovation systems*, Paris.
- OECD (2001), *Innovative clusters: drivers of national innovation systems*, Paris.
- OECD (2002), *Science, technology and industry outlook*, Paris.
- OECD (2006a), *Innovation in energy technology: comparing national systems at the sectoral level*, Paris.
- OECD (2006b), *Innovation in pharmaceutical biotechnology: comparing national systems at the sectoral level*, Paris.
- OECD (2006c), *Science, technology and industry outlook 2006*, Paris.
- OECD (2007a), *Competitive regional clusters: national policy approaches*, Paris.
- OECD (2007b), *Globalization and the regional economies*, Paris.
- OECD (2007c), *Main science and technology indicators*, Paris.
- OECD (2007d), *The regional dimension of innovation*, Paris, GOV/TDPC (2007) 20.
- OECD (2007e), *STI outlook 2007*, Paris.
- OECD (2008), *Main science and technology indicators*, Paris.
- O'Rourke, K. (2000), 'Tariffs and growth in the late 19th century', *Economic Journal*, **110**, 456–83.
- Osman-Gani, A. (2004), 'Human capital development in Singapore: an analysis of national policy perspectives', *Advances in Developing Human Resources*, **6**(3), 276–87.
- Ozawa, T. (2001), *The 'hidden' side of the 'flying geese' catch-up model: Japan's dirigiste institutional setup and a deepening financial morass*, University of Colorado at Fort Collins, Department of Economics Discussion Paper.
- Ozawa, T. (2002), 'Pax-Americana led macro-clustering and flying-geese style catch-up in East Asia: mechanisms of regionalized endogenous growth', University of Colorado at Fort Collins, Department of Economics Discussion Paper.
- Papaconstantinou, G., and W. Polt (1997), 'Policy evaluation in innovation and technology: an overview', in OECD, *International conference on policy evaluation in innovation and technology*, Paris, Chapter 1.

- Parayil, G. (2005), 'From "Silicon Island" to "Biopolis of Asia": innovation policy and shifting competitive strategy in Singapore', *California Management Review*, **47**(2), 50–73.
- Patalinghug, E. (2000), 'Competition policy, technology policy and Philippine industrial competitiveness', *Social Science Diliman*, **1**(1), 31–59.
- Patalinghug, E. (2003), *The Philippine national innovation system: structure and characteristics*, Makati City, Philippine Institute for Development Studies, Discussion Paper Series 2003–04.
- Patel, P., and K. Pavitt (1994), 'National innovation systems: why they are important, and how they might be measured and compared', *Economics of Innovation and New Technology*, **3**(2), 77–95.
- Pavcnik, N. (2002), 'Trade disputes in commercial aircraft', *World Economy*, **25**(5), 733–51.
- Pavitt, K., and P. Patel (1999), 'Global corporations and national systems of innovation', in D. Archibugi, J. Howells, and J. Michie (eds), *Innovation policy in a global economy*, Cambridge: Cambridge University Press, pp. 94–119.
- Peled, D. (2001), *Defense R&D and economic growth in Israel: a research agenda*, Haifa, Technion Institute of Technology, Samuel Neaman Institute for Advanced Research in Science and Technology.
- Pellerin, C. (2007), 'U.S. Navy scientists share research benefits with the world', January 29. www.america.gov/st/washfile-english/2007/January
- Pentikäinen, T. (2000), *Economic evaluation of the Finnish cluster programmes*, Working Paper 50/00, VTT, Group of Technology Studies, Espoo.
- Perez, C., and L. Soete (1988), 'Catching up in technology: entry barriers and windows of opportunity', in G. Dosi, C. Freeman, G. Siverberg, and L. Soete (eds), *Technical change and economic theory*, London: Pinter, 458–79.
- Perroux, F. (1970), 'Note on the concept of growth pole', in D. McKee, R. Dean, and D. Leathy (eds), *Regional economics: theory and practice*, New York: Free Press, 93–103.
- Pianta, M., and G. Sirilli (1997), 'The use of innovation surveys for policy evaluation in Italy', in OECD, *International conference on policy evaluation in innovation and technology*, Paris, Chapter 19.
- Pietrobelli, C., and R. Rabellotti (2004), *Upgrading clusters in Latin America: the role of policies*, Washington, DC: Inter-American Development Bank.
- Piore, M., and C. Sabel (1984), *The second industrial divide: possibilities for prosperity*, New York: Basic Books.

- Pisano, G. (2006), *Science business: the promise, the reality and the future of biotech*, Boston, MA: Harvard Business School Press.
- Platt, D.C.M., and G. Di Tella (eds) (1985), *Argentina, Australia and Canada: studies in comparative development, 1870–1965*, Cambridge, MA: Cambridge University Press.
- Porter, M. (1998), *On competition*, Cambridge, MA: Harvard Business School Press.
- Porter, M. (2000), 'Location, clusters and company strategy', in G.L. Clark, M.P. Feldman, and M.S. Gertler (eds), *The Oxford handbook of economic geography*, New York: Oxford University Press, 253–74.
- Porter, M., Monitor Group, on the Frontier and Council on Competitiveness (2001), *Clusters of innovation: regional foundations of U.S. competitiveness*, Washington, DC, Council on Competitiveness.
- Porter, M., and H. Takeuchi (1999), 'Fixing what really ails Japan', *Foreign Affairs*, **78**(3), 66–79.
- Prebisch, R. (1950a), *The economic development of Latin America and its principal problems*, New York: United Nations.
- Prebisch, R. (1950b), *Theoretical and Practical Problems of Economic Growth, Mexico*, UNCTAD (United Nations Commerce, Trade and Development Organization).
- Rasiah, R., X. Kong, and Y. Lin (2008), 'Semiconductors: explaining variations in catch up strategies in Malaysia, China and Taiwan', in F. Malerba and R. Nelson (eds), *Catching-up* (forthcoming).
- Reinert, E. (2007), *How rich countries got rich and why poor countries stay poor*, New York, Public Affairs.
- Research Triangle Region Task Force (2004), *Staying on top: a competitiveness plan for the Research Triangle Region*, Raleigh, North Carolina.
- Richards, A. (1992), *Higher education in Egypt*, Washington, DC, World Bank Population and Human Resource Department Working Paper Series, WPS 862.
- Roberts, B., and M.J. Enright (2004), 'Industry clusters in Australia: recent trends and prospects', *European Planning Studies*, **12**(1), 99–121.
- Rodriguez, E. (1998), 'International migration and income distribution in the Philippines', *Economic Development and Cultural Change*, **46**, 329–50.
- Rodriguez-Clare, A. (2001), 'Costa Rica's development strategy based on human capital and technology: how it got there, the impact of Intel and lessons for other countries', *Journal of Human Development*, **2**(2), 311–24.
- Roeland, T., and P. den Hertog (1999), 'Cluster analysis and cluster-based

- policy making: the state of the art', in OECD, *Boosting innovation: the cluster approach*, Paris, OECD Proceedings, 413–525.
- Romer, P. (1986), 'Increasing returns and long run growth', *Journal of Political Economy*, **94**(5), 1002–37.
- Romer, P. (1990), 'Endogenous technological change', *Journal of Political Economy*, **98**(5), S71–S102.
- Rosenberg, N. (1994), *Exploring the black box: technology, economics, and history*, Cambridge: Cambridge University Press.
- Rosenberg, N. (2000), *Schumpeter and the endogeneity of technology*, London: Routledge.
- Rouvinen, P. (2006), *Advantage Finland: past, present and future*, Presentation to the International Conference on Korea's Industry Vision 2020, Seoul.
- Rumbley, L., I. Pacheco, and P.G. Altbach (2008), *International comparison of academic salaries*, Boston College, Center for International Higher Education.
- Ruttan, V. (2001), *Technology, growth and development*, Oxford: Oxford University Press.
- Sabatier, P. (ed.) (1999), *Theories of the policy process*, Boulder, CO: Westview Press.
- Sadik, A.T., and A.A. Bobol (2001), 'Capital flows, FDI and technology spillovers: evidence from the Arab countries', *World Development*, **29**(12), 2111–25.
- Sainsbury, Lord (2007), *The race to the top: a review of government's science and innovation policies*, Norwich: Her Majesty's Stationery Office.
- Samuels, R.J. (1987), *The business of the Japanese State*, Ithaca, NY, Cornell University Press.
- Santisteban, M.A. (2003), 'Las asociaciones cluster en la Comunidad autónoma del País Vasco (1986–2002), tradición, interacción y aprendizaje en la colaboración gobierno-industria,' *Economiaz*, 53.
- Santisteban, M.A. (2006), 'Business systems and cluster policies in the Basque country and Catalonia (1990–2004)', *European Urban and Regional Studies*, **13**(1), 25–39.
- Saviotti, P.P. (1996), *Technological evolution, variety and the economy*, Cheltenham, UK, Edward Elgar Publishing.
- Saviotti, P.P. (1997), 'Innovation systems and evolutionary theories', in C. Edquist (ed.), *Systems of innovation*, London: Pinter, 180–99.
- Saviotti, P.P., and A. Pyka (2004), 'Economic development by the creation of new sectors', *Journal of Evolutionary Economics*, **14**, 1–35.
- Saxenian, A.L. (2004), 'Taiwan's Hsinchu region', in T. Bresnahan and A. Gambardella (eds), *Building high-tech clusters*, Cambridge: Cambridge University Press, 190–228.

- Schellings, R., and F. Gault (2006), *Size and persistence of R&D performance in Canadian firms, 1994 to 2002*, Ottawa, Statistics Canada, Science, Innovation and Electronic Innovation Division, Cat. 88F0006XIE.
- Schienstock, G. (2007), 'From path dependency to path creation: Finland on its way to the knowledge-based economy', *Current Sociology*, **55**(10), 92–109.
- Schot, J., and F.W. Geels (2007), 'Niches in evolutionary theories of technical change: a critical survey of the theory', *Journal of Evolutionary Economics*, **17**(5), 605–22.
- Schumpeter, J. (1934), *The theory of economic development* (1911), Cambridge, MA: Harvard University Press.
- Schumpeter, J. (1950), *Capitalism, socialism and democracy* (1942), New York: Harper.
- Shapira, P. (2001), 'U.S. manufacturing extension partnerships: technology policy reinvented?' *Research Policy*, **30**, 977–92.
- Shevell, S. (2002), 'Law versus morality as regulators of conduct', *American Law and Economics Review*, **4**(2), 227–57.
- Sigurdson, J. (2004), *Regional innovation systems in China*, Stockholm, European Institute of Japanese Studies, Working Paper No. 195.
- Singapore (2007), *2006 education statistics digest*, Ministry of Education.
- Smith, K. (1991), 'Innovation policy in an evolutionary context', in P.P. Saviotti and J.S. Metcalfe (eds), *Evolutionary theories of economic and technological change*, Chur, Switzerland: Harwood Academic Publishers, 256–75.
- Solow, R. (1956), 'A contribution to the theory of economic growth', *Quarterly Journal of Economics*, **70**(1), 65–94.
- Spitz, P.H. (1988), *Petrochemicals: the rise of an industry*, New York: Wiley.
- Statistics Canada (2002), *Profile of spin-off firms in the biotechnology sector: results from biotechnology use and development survey – 1999*, Ottawa, Cat. 88F0006XIE02004.
- Sterman, J. (2000), *Business dynamics, systems thinking and modeling for a complex world*, New York: McGraw-Hill.
- Stiglitz, J. (1998), 'The private use of public interests', *Journal of Economic Perspectives*, **12**(2), 3–22.
- Stiglitz, J. (2002), *Globalization and its discontents*, New York: Norton.
- Tassey, G. (1991), 'The functions of technology infrastructure in a competitive economy', *Research Policy*, **20**, 345–61.
- Tassey, G. (2001), 'R&D policy models and data needs', in M.P. Feldman and A.N. Link (eds), *Innovation policy in the knowledge-based economy*, Boston, MA: Kluwer, 37–72.

- TEDCO (Technology Development Corporation) (2008), *Annual report*, Maryland.
- Teixeira, P., and A. Amaral (2001), 'Private higher education and diversity: an exploratory survey', *Higher Education Quarterly*, **55**(4), 359–95.
- Temple, J. (2001), 'Growth effects of education and social capital among OECD countries', *OECD Economic Studies*, **33**, 58–101.
- Teubal, M. (1996), 'R&D and technology policy in NICs as learning processes', *World Development*, **24**(3), 449–60.
- Teubal, M. (1997), 'A catalytic and evolutionary approach to horizontal technology policy', *Research Policy* **25**, 1161–88.
- Teubal, M. (1998), 'Policies for promoting enterprise restructuring in national systems of innovation: triggering cumulative learning and generating system effects', Paris, OECD, *STI Review*, **22**, 134–70.
- Teubal, M. (2002), 'What is the systems perspective on innovation and technology policy (ITP) and how can we apply it to developing and newly industrialized economies?', *Journal of Evolutionary Economics*, **12**, 233–57.
- Texier, F. (2000), *Industrial diversification and innovation: an international study of the aerospace industry*, Cheltenham, UK, Edward Elgar Publishing.
- Tödting, F., and M. Trippel (2005), 'One size fits all? Towards a differentiated regional innovation policy', *Research Policy*, **34**, 1203–19.
- Trajtenberg, M. (2001), 'R&D policy in Israel', in M.P. Feldman and A.N. Link (eds), *Innovation policy in the knowledge-based economy*, Boston, MA: Kluwer, 409–54.
- Uenohara, M., T. Sugano, J.G. Linvill, and F.B. Weinstein (1984), 'Background', in D.I. Okimoto, T. Sugano, and F.B. Weinstein (eds), *Competitive edge: the semiconductor industry in the U.S. and Japan*, Stanford, CA: Stanford University Press, 9–34.
- United Kingdom Department of Trade and Industry (1999a), *Biotechnology Clusters*, London.
- United Kingdom Department of Trade and Industry (1999b), *Genome Valley*, London.
- United Nations (2004), *Republic of Argentina public administration country profile*, UN Department of Economic and Social Affairs.
- United Nations (2006), *Arab human development report*, New York.
- United Nations Conference on Trade and Development (UNCTAD) (2007), *World investment report*, Vienna.
- United Nations Educational, Scientific and Cultural Organization (UNESCO) (2005a), *Education in perspective 2005*, Paris.
- UNESCO (2005b), *Education trends in perspective: analysis of the world education indicators*, Montreal, UNESCO Institute for Statistics.

- UNIDO (2003), *Strategies for regional innovation systems: transfer and applications*, Vienna.
- United States Department of Justice (2008), *Siemens AG and three subsidiaries plead guilty to Foreign Corrupt Practices Act violations and agree to pay \$450 million in combined criminal fines*, Press release, December 15, 2008.
- Valderrama-Ferrando, L. (2006), *Institutional inertia*, Washington, DC: International Monetary Fund Institute Working Paper.
- Van de Loo, B. (2004), 'The failure of the Philippine presidential system', *Asia Europe Journal* 2, 257–69.
- Van Leeuwen, B. (2007), 'Human capital and economic growth in India, Indonesia and Japan: a quantitative analysis, 1890–2000', PhD dissertation, University of Utrecht.
- Vernon, R. (1966), 'International investment and international trade in the product cycle', *Quarterly Journal of Economics*, 80(2), 190–207.
- Wade, R. (1990), *Governing the market: economic theory and the role of government in South East Asian industrialization*, Princeton, NJ: Princeton University Press.
- Wajda, J. (2007), 'Generosity of R&D', Presentation to the TIP Workshop on R&D Tax Treatment in OECD Countries: Comparisons and Evaluation, Paris.
- Walter, R. (1969), 'The intellectual background of the 1918 university reform in Argentina', *Hispanic American Historical Review*, 49(2), 233–53.
- Walwyn, D. (2007), 'Finland and the mobile phone industry: a case study of the return on investment from government funded R&D', *Technovation*, 27, 335–41.
- Warda, J. (1999), *Measuring the attractiveness of R&D tax incentives: Canada and major industrial countries*, Ottawa, Statistics Canada, Science, Innovation and Electronic Information Division, Cat. 880006XPB No.10.
- Weimer, D.L., and A.R. Vining (1992), *Policy analysis: concepts and practice*, 2nd ed., Englewood Cliffs, NJ, Prentice Hall.
- Wells, L.T., Jr. (1983), *Third world multinationals*, Cambridge, MA: MIT Press.
- Werke, C., and S. Athreye (2004), 'Marshall's disciples: knowledge and innovation driving regional economic development and growth', *Journal of Evolutionary Economics*, 14, 505–23.
- Williams, J.R. (1994), 'Strategy and the search for rents: the evolution of diversity among firms', in R.P. Rumelt, D. Schendel, and D.J. Teece (eds), *Fundamental issues in strategy*, Boston, MA, Harvard Business School Press, 229–46.

- Williamson, O. (1985), *The economic institutions of capitalism*, New York: Free Press.
- Witt, U. (ed.) (1993), *Evolutionary economics*, Cheltenham, UK, Edward Elgar Publishing.
- Wong, P.K. (2003), 'From using to creating technology: the evolution of Singapore's national innovation system and the changing role of public policy', in S. Lall and S. Urata (eds), *Competitiveness: FDI and technological activity in East Asia*, Cheltenham, UK, Edward Elgar Publishing, pp. 191–238.
- World Bank (2003), *Combating corruption in Indonesia: enhancing accountability for development*, New York: East Asia Poverty Reduction and Economic Management Unit.
- Wössmann, L. (2002), 'Cross-country evidence on human capital and the level of economic development: the role of measurement issues in education', *Historical Social Research*, **27**(4), 47–76.
- Wu, Y., D. Popp, and S. Bretschneider (2007), 'The effects of innovation policies on business R&D: a cross-national study', *Economics of Innovation and New Technology*, **16**(4), 237–53.
- Yamawaki, H. (2001), *The evolution and structure of industrial clusters in Japan*, Washington, DC: World Bank Institute.
- Zahra, S.A., and G. George (2002), 'Absorptive capacity: a review, reconceptualization, and extension', *Academy of Management Review*, **27**, 185–203.
- Zerbe, R.O., and H.E. McCurdy (1999), 'The failure of market failure', *Journal of Policy Analysis and Management*, **18**(4), 558–78.
- Zhu, P., W. Xu, and N. Lundin (2006), 'The impact of government's funding and tax incentives on industrial R&D investments – empirical evidences from industrial sectors in Shanghai', *China Economic Review*, **17**, 51–69.
- Zucker, L., M. Darby, and M.B. Brewer (1998), 'Intellectual human capital and the birth of U.S. biotechnology enterprises', *American Economic Review*, **88**(1), 290–360.