

Bibliography

- [1] P. Aghion and P. Howitt. *Endogenous growth theory*. 2d. ed. The MIT Press, 1998.
- [2] C.D. Aliprantis, K.C. Border, and O. Burkinshaw. New proof of the existence of equilibrium in a single-sector growth model. *Macroeconomic dynamics* **1**, pages 669–679, 1997.
- [3] F. Alvarez and N. Stokey. Dynamic programming with homogeneous functions. *Journal of economic theory* **82**, pages 167–189, 1998.
- [4] R. Amir. Sensivity analysis in multisector optimal economic models. *Journal of mathematical economics* **25**, pages 123–141, 1996.
- [5] K.J. Arrow and M.D. Intriligator, editors. *Handbook of mathematical economics*, Vol. 3. North-Holland, Amsterdam, Holland, 1986.
- [6] P. Askenazy and C. Le Van. A model of optimal growth strategy. *Journal of economic theory* **85**, pages 24–51, 1999.
- [7] K. Askri and C. Le Van. Differentiability of the value function of nonclassical optimal growth models. *Journal of optimization theory and applications* **97**, pages 591–604, 1998.
- [8] R.J. Barro and X. Sala-I-Martin. *Economic growth*. McGraw-Hill, Inc., 1995.
- [9] R.A. Becker and J. H. Boyd III. *Capital Theory, Equilibrium Analysis and Recursive Utility*. Blackwell Publishers, 1995.
- [10] R. Bellman. *Dynamic Programming*. Princeton: Princeton University Press, 1957.
- [11] J. Benhabib and K. Nishimura. Competitive equilibrium cycles. *Journal of economic theory* **35**, pages 284–306, 1985.
- [12] L.M. Benveniste and J.A. Scheinkman. On the differentiability of the value function in dynamic models of economies. *Econometrica* **47**, pages 727–732, 1979.
- [13] C. Berge. *Espaces Topologiques*. Paris: Dunod, English translation: Topological Spaces, Edinburgh London: Oliver and Boyd, 1963, 1959.

- [14] T.F. Bewley. Existence of equilibria in economies with infinitely many commodities. *Journal of economic theory* **4**, pages 514–540, 1972.
- [15] T.F. Bewley. An integration of equilibrium theory and turnpike theory. *Journal of mathematical economics* **10**, pages 233–267, 1982.
- [16] M. Boldrin and R. Deneckere. Sources of complex dynamics in two sector growth models. *Journal of economic dynamics and control* **14**, pages 627–653, 1990.
- [17] M. Boldrin and L. Montrucchio. On the indeterminacy of capital accumulation paths. *Journal of economic theory* **40**, pages 26–39, 1986.
- [18] J.H. Boyd III. Recursive utility and the ramsey model. *Journal of economic theory* **50**, pages 326–345, 1990.
- [19] W.A. Brock. On existence of weakly maximal programmes in a multi-sector economy. *Review of economic studies* **37**, pages 275–280, 1970.
- [20] H. Cartan. *Calcul Différentiel*. Hermann Paris, Collection Méthodes, 1967.
- [21] D. Cass. Optimum growth in an aggregative model of accumulation. *Review of economic studies* **32**, pages 233–240, 1965.
- [22] G. Choquet. *Topologie*. Masson et Cie, 1969.
- [23] C.W. Clark. Economically optimal policies for the utilization of biologically renewable resources. *Mat. Biosci.* **17**, pages 245–268, 1971.
- [24] F.H. Clarke. *Optimization and nonsmooth analysis*. A Wiley-interscience publication, 1983.
- [25] R.A. Dana and C. Le Van. On the bellman equation of the overtaking criterion. *Journal of optimization theory and applications* **67**, pages 587–600, 1990.
- [26] R.A. Dana and C. Le Van. Equilibria of a stationary economy with recursive preferences. *Journal of optimization theory and applications* **71**, pages 289–313, 1991.
- [27] R.A. Dana and C. Le Van. On the bellman equation of the overtaking criterion: addendum. *Journal of optimization theory and applications* **78**, pages 605–612, 1993.

- [28] G. Debreu. Excess demand functions. *Journal of mathematical economics* **1**, pages 15–21, 1973.
- [29] W.D. Dechert and K. Nishimura. A complete characterization of optimal growth paths in an aggregated model with a non-concave production function. *Journal of economic theory* **31**, pages 332–354, 1983.
- [30] R. Deneckere and S. Pelikan. Competitive chaos. *Journal of economic theory* **40**, pages 13–25, 1986.
- [31] J. Dieudonne. *Foundations of Modern Analysis*. Academic Press, 1969.
- [32] C.-H. Dimaria and C. Le Van. Debt, corruption, r&d and growth in developing countries. *Macroeconomic Dynamics* , 2002.
- [33] E. Domar. Capital expansion, rate of growth, and employment. *Econometrica* **14**, pages 137–147, 1946.
- [34] E. Domar. Expansion and employment. *American economic review* **37**, pages 34–55, 1947.
- [35] J. Duran. On dynamic programming with unbounded returns. *Economic theory* **15**, pages 339–352, 2000.
- [36] J. Duran and C. Le Van. Simple proof of existence of equilibrium in a one-sector model with bounded or unbounded returns from below. *Macroeconomic dynamics* , 2002.
- [37] M. Florenzano, C. Le Van, and P. Gourdel. *Finite Dimensional Convexity and Optimization*. Springer, 2001.
- [38] M. Frankel. The production function in allocation and growth: a synthesis. *American economic review* **55/3**, pages 296–319, 1962.
- [39] D. Gale. On optimal development in a multi-sector economy. *Review of economic studies* **34**, pages 1–18, 1967.
- [40] J.M. Grandmont. *Periodic and aperiodic in discrete one-dimensional systems*. In W. and Mas-Colell [84], 1986.
- [41] I. Hadji and C. Le Van. Convergence of equilibria in an intertemporal general equilibrium model. *Journal of economic dynamics and control* **18**, pages 381–396, 1994.
- [42] R.F. Harrod. An essay in dynamic theory. *Economic Journal*, **49**, pages 14–33, 1939.

- [43] R.F. Harrod. *Towards a dynamic economics*. London: Macmillan, 1948.
- [44] T.C. Koopmans. On the concept of optimal economic growth. *Pontificiae academiae scientiarum varia* **28**, pages 225–300, 1965.
- [45] S. Lang. *Analysis II*. Addison-Wesley Publishing Company, Inc., 1969.
- [46] A. Lasota and J.A. Yorke. On the existence of invariant measures for piecewise monotonic transformations. *AMS* **183**, pages 481–485, 1973.
- [47] C. Le Van and L. Morhaim. Optimal growth models with bounded or unbounded returns: a unifying approach. *Journal of economic theory*, 2002.
- [48] C. Le Van and Y. Vailakis. Recursive utility and optimal growth with bounded or unbounded returns. *DP CORE*, 2002.
- [49] T. Li and J.A. Yorke. Period three implies chaos. *American Mathematical Monthly* **82**, pages 985–992, 1975.
- [50] R. Lucas. On the mechanics of economic development. *Journal of monetary economics* **22**, pages 3–42, 1988.
- [51] M. Majumdar and T. Mitra. On optimal exploitation of a renewable resource in a non-convex environment and the minimum safe standard of conservation. *W.P. No 223, Cornell University*, 1980.
- [52] M. Majumdar and T. Mitra. Intertemporal allocation with a non-convex technology: the aggregative framework. *Journal of economic theory* **27**, pages 101–136, 1982.
- [53] R. Mantel. On the characterization of aggregate excess demand. *Journal of economic theory* **7**, pages 348–353, 1974.
- [54] T. Maruyama and Takahashi, editors. *Nonlinear dynamics and convex analysis in economic theory*. Springer-Verlag, Berlin, 1986.
- [55] L.W. McKenzie. Turnpike theory, discounted utility, and the von-neumann facet. *Journal of economic theory* **30**, pages 330–352, 1983.
- [56] L.W. McKenzie. *Optimal economic growth, turnpike theorems, and comparative dynamics*, pages 1281–1358. In Arrow and Intriligator [5], 1986.

- [57] T. Mitra. Sensitivity of optimal programs with respect to changes in target stocks: the case of irreversible investment. *Journal of economic theory* **29**, pages 172–184, 1983.
- [58] T. Mitra. An exact discount factor restriction for period-three cycles in dynamic optimization models. *Journal of economic theory* **69**, pages 281–305, 1996.
- [59] T. Mitra and D. Ray. Efficient and optimal programs when investment is irreversible. *Journal of economics* , 1982.
- [60] T. Mitra and G. Sorger. Rationalizing policy functions by dynamic optimization. *Econometrica* **67**, pages 375–392, 1999.
- [61] L. Montrucchio. Thompson metric, contraction property and differentiability of policy functions. *Journal of economic behaviour & organisation* **33**, pages 449–466, 1998.
- [62] K. Nishimura and G. Sorger. Optimal cycles and chaos; a survey. *Studies in Nonlinear Dynamics and Econometrics* **1**, pages 11–28, 1996.
- [63] K. Nishimura and M. Yano. *Non-linearity and business cycles in a two-sector equilibrium model: an example with Cobb-Douglas production functions*, pages 231–245. In Maruyama and Takahashi [54], 1986.
- [64] K. Nishimura and M. Yano. On the least upper bound of discount factors that are compatible with optimal period-three cycles. *Journal of economic theory* **69**, pages 306–333, 1996.
- [65] Stokey N.L. and R. Lucas with E. Prescott. *Recursive Methods in Economic Dynamics*. Harvard University Press, 1989.
- [66] F. Ramsey. A mathematical theory of saving. *Economic journal* **38**, pages 543–559, 1928.
- [67] A.W. Roberts and D.E. Varberg. *Convex Functions*. New York San Francisco London: Academic Press, 1973.
- [68] P. Romer. Increasing returns and long-run growth. *Journal of political economy* **94/5**, pages 1002–1037, 1986.
- [69] P. Romer. Endogenous technological change. *Journal of political economy* **98/5**, pages s71–s102, 1990.
- [70] Rockafellar R.T. *Convex Analysis*. 2d. ed. Princeton: Princeton University Press, 1972.
- [71] W. Rudin. *Functional Analysis*. 2d. ed. McGraw-Hill International Editions, 1991.

- [72] P.A. Samuelson. Optimality of profit, including prices under ideal planning. *Proceedings of the National Academy of Sciences of the United States of America* **70**, pages 2109–2111, 1973.
- [73] P.A. Samuelson and R. Solow. A complete capital model involving heterogeneous capital goods. *Quarterly journal of economics* **70**, pages 537–562, 1956.
- [74] M.S. Santos. Smoothness of the policy function in discrete time economic models. *Econometrica* **59**, pages 1365–1382, 1991.
- [75] A.N. Sarkovski. Coexistence of cycles of a continuous map of a line into itself. *Ukrainian mathematical journal* **16**, pages 61–71, 1964.
- [76] J.A. Scheinkman. On optimal steady states of n -sector growth models when utility is discounted. *Journal of economic theory* **12**, pages 11–30, 1976.
- [77] R. Solow. A contribution to the theory of economic growth. *Quarterly journal of economics* **70/1**, pages 65–94, 1956.
- [78] H. Sonnenschein. Do walras identity and continuity characterize the class of community excess demand functions? *Journal of economic theory* **6**, pages 345–354, 1973.
- [79] G. Sorger. *Minimum impatience theorems for recursive economic models*. Springer-Verlag, 1992.
- [80] G. Sorger. Period three implies heavy discounting. *Mathematics of operations research* **19**, pages 1007–1022, 1994.
- [81] G. Sorger. On the sensitivity of optimal growth paths. *Journal of mathematical economics* **24**, pages 206–233, 1995.
- [82] T. Swann. Economic growth and capital accumulation. *Economic Record* **32**, pages 334–361, 1956.
- [83] C.C. von Weizsacker. Existence of optimal programmes of accumulation for an infinite time horizon. *Review of economic studies* **32**, pages 85–104, 1965.
- [84] Hildenbrand W. and A. Mas-Colell, editors. *Contributions to mathematical economics*. North-Holland, Amsterdam, Holland, 1986.
- [85] M.L. Weitzman. Duality theory for infinite horizon convex models. *Management Science* **19**, pages 783–789, 1973.