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References:

- [1] Benveniste, L.M; Scheinkman, J.A, On the differentiability of the value function in dynamic models of economics, *Econometrica*, 47, 727-732, (1979) · [Zbl 0435.90031](#)
- [2] Brock, W.A, On existence of weakly maximal programmes in a multisector economy, *Rev. econ. studies*, 37, 275-280, (1970) · [Zbl 0212.23901](#)
- [3] Brock, W.A, The global asymptotic stability of optimal control: A survey of recent results, (), 207-237
- [4] Brock, W.A; Scheinkman, J.A, Global asymptotic stability of optimal control systems with applications to the theory of economic growth, *J. econ. theory*, 12, 164-190, (1976) · [Zbl 0348.90018](#)
- [5] Brock, W.A; Scheinkman, J.A, The global asymptotic stability of optimal control with applications to dynamic economic theory, () · [Zbl 0411.49003](#)
- [6] Cass, D; Shell, K, The structure and stability of competitive dynamical systems, *J. econ. theory*, 12, 31-70, (1976) · [Zbl 0348.90039](#)
- [7] Gale, D, On optimal development in a multisector economy, *Rev. econ. studies*, 34, 1-18, (1967)
- [8] Kurz, M, Optimal economic growth and wealth effects, *Internat. econ. rev.*, 9, 348-357, (1968) · [Zbl 0164.50401](#)
- [9] Kurz, M, The general instability of a class of competitive growth processes, *Rev. econ. studies*, 35, 155-174, (1968) · [Zbl 0181.47401](#)
- [10] Lau, L, A characterization of the normalized restricted profit function, *J. econ. theory*, 12, 131-163, (1976) · [Zbl 0341.90012](#)
- [11] Liviatan, N; Samuelson, P.A, Notes on turnpikes: stable and unstable, *J. econ. theory*, 1, 454-475, (1969)
- [12] Magill, M.J.P, Some new results on the local stability of the process of capital accumulation, *J. econ. theory*, 15, 174-210, (1977) · [Zbl 0372.90009](#)
- [13] McKenzie, L.W, Accumulation programs of maximal utility and the von Neumann facet, (), 353-383
- [14] McKenzie, L.W, Turnpike theory, *Econometrica*, 44, 841-865, (1976) · [Zbl 0356.90006](#)
- [15] Rockafellar, R.T, Saddle points of Hamiltonian systems in convex problems of Lagrange, *J. optimization theory appl.*, 12, 367-390, (1973) · [Zbl 0248.49016](#)
- [16] Rockafellar, R.T, Saddle points of Hamiltonian systems in convex Lagrange problems having a nonzero discount rate, *J. econ. theory*, 12, 71-113, (1976) · [Zbl 0333.90007](#)
- [17] Sutherland, W.R.S, On optimal development in a multisectoral economy: the discounted case, *Rev. econ. studies*, 37, 585-589, (1970) · [Zbl 0205.48804](#)
- [18] Scheinkman, J.A, Stability of separable hamitonians and investment theory, *Rev. econ. studies*, 45, 559-570, (1978) · [Zbl 0408.90024](#)
- [19] Lefschetz, S, *Stability of nonlinear control systems*, (1965), Academic Press New York · [Zbl 0136.08801](#)
- [20] Nishimura, K.G, A new concept of stability and the theory of optimal growth, (March 1979), Yale University, mimeo
- [21] Nishimura, K.G, A note on the global stability in dynamical economic systems, *Econ. lett.*, 4, 95-98, (1979)

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