

1. Record Nr.	UNISA996418201203316
Autore	Zaslavski Alexander J.
Titolo	Turnpike theory for the Robinson-Solow-Srinivasan model / / Alexander J. Zaslavski
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2020] Â©2020
ISBN	3-030-60307-5
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (X, 442 p.)
Collana	Springer Optimization and Its Applications ; ; Volume 166
Disciplina	153.9
Soggetti	Mathematical ability Turnpike theory (Economics)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	1. Introduction -- 2 The RSS model and its basic properties -- 3. Infinite horizon optimization. 4. Turnpike results for the RSS model -- 5.The RSS model with a nonconcave utility function. - 6.Infinite horizon nonautonomous optimization problems -- 7. One-dimensional RSS model -- 8. Optimal Programs -- 9. Turnpike for the RSS model with nonconcave utility functions. 10. An autonomous one-dimensional model -- 11. The continuous-time Robinson–Solow–Srinivasan model -- References -- Index.
Sommario/riassunto	This book is devoted to the study of a class of optimal control problems arising in mathematical economics, related to the Robinson–Solow–Srinivasan (RSS) model. It will be useful for researches interested in the turnpike theory, infinite horizon optimal control and their applications, and mathematical economists. The RSS is a well-known model of economic dynamics that was introduced in the 1960s and as many other models of economic dynamics, the RSS model is determined by an objective function (a utility function) and a set-valued mapping (a technology map). The set-valued map generates a dynamical system whose trajectories are under consideration and the objective function determines an optimality criterion. The goal is to find optimal trajectories of the dynamical system, using the optimality criterion. Chapter 1 discusses turnpike properties for some classes of

discrete time optimal control problems. Chapter 2 present the description of the RSS model and discuss its basic properties. Infinite horizon optimal control problems, related to the RSS model are studied in Chapter 3. Turnpike properties for the RSS model are analyzed in Chapter 4. Chapter 5 studies infinite horizon optimal control problems related to the RSS model with a nonconcave utility function. Chapter 6 focuses on infinite horizon optimal control problems with nonautonomous optimality criterions. Chapter 7 contains turnpike results for a class of discrete-time optimal control problems. Chapter 8 discusses the RSS model and compares different optimality criterions. Chapter 9 is devoted to the study of the turnpike properties for the RSS model. In Chapter 10 the one-dimensional autonomous RSS model is considered and the continuous time RSS model is studied in Chapter 11.
