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Nonlinear Oligopolies

The book focuses on the dynamics of nonlinear oligopoly models. It discusses the classical Cournot model with a large variety of demand and cost functions that illustrate the many different types of possible best response functions and it shows the existence of unique and multiple equilibria. Particular emphasis is placed on the influence of nonnegativity and capacity constraints. Dynamics are introduced under various assumptions for the adjustment process. An introduction to the analysis of global dynamics is given through some specific examples. The book also considers concave and general oligopolies and gives conditions for the local asymptotic stability of their equilibria, and it investigates global dynamics in some special cases. Other oligopolies examined include market share attraction games, labor-managed oligopolies, partially cooperating firms and models with intertemporal demand attraction. Local/global stability analyses are carried out for these models and the impact of constraints is discussed. The book contains a number of technical appendices that summarize techniques of global dynamics not easily accessible elsewhere.

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