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Sommario/riassunto

Gregory C. Chow, father of the Chow Test of stability of economic relations and a major contributor to econometrics and economics, here provides a unified and simple treatment of dynamic economics. Using dynamic optimization as his main theme, Chow introduces the Lagrange method as a more convenient tool than dynamic programming for solving dynamic optimization problems. Dynamic Economics presents the optimization framework for dynamic economics so that readers can understand and use it for applied and theoretical research. Chow shows how the method of Lagrange

multipliers is easier and more efficient for solving dynamic optimization problems than dynamic programming, and so enables readers to grasp the substance of dynamic economics more fully. He employs the Lagrange method to study and solve problems in a variety of areas including economic growth, general equilibrium theory, business cycles, dynamic games, finance, and investment--while also discussing numerical methods and analytical solutions. Teaching by example, Chow solves simple problems before moving on to more general propositions. Problems are provided at the end of each chapter. This accessible and wide-ranging work is an ideal primary text for graduate and undergraduate courses in dynamic economics. It can also be used as a supplementary text for courses in mathematics for economists, mathematical economics, macroeconomics, economic development, finance, operations research, and control theory in engineering schools, among others.
