

Repeated Games: A Comprehensive Guide

Repeated games are a type of game in which the same players interact with each other multiple times. This can happen in a variety of settings, such as when firms compete in a market over time, or when countries negotiate over trade agreements. Repeated games are different from one-shot games, in which players only interact with each other once. This difference has important implications for the strategies that players choose.

In a one-shot game, players are only concerned with maximizing their payoff in the current period. In a repeated game, however, players must also consider how their actions will affect their future payoffs. This can lead to cooperation, even in situations where it would not be possible in a one-shot game.

The theory of repeated games has been developed over the past several decades. A number of important concepts have been developed in this area, including the following:



Repeated Games (Econometric Society Monographs

Book 55) by Jean-François Mertens

★★★★★ 5 out of 5

Language : English
File size : 15386 KB
Text-to-Speech : Enabled
Screen Reader : Supported
Enhanced typesetting : Enabled
Print length : 597 pages

FREE

DOWNLOAD E-BOOK



- **Nash equilibrium:** A Nash equilibrium is a set of strategies, one for each player, such that no player can improve their payoff by unilaterally changing their strategy.
- **Subgame perfect equilibrium:** A subgame perfect equilibrium is a Nash equilibrium that is also perfect in every subgame of the game.
- **Folk theorem:** The folk theorem states that any outcome that is feasible and Pareto efficient can be supported as a subgame perfect equilibrium in a repeated game.

These concepts are essential for understanding the theory of repeated games. They provide a framework for analyzing the strategies that players choose in these games and for predicting the outcomes of these games.

The theory of repeated games has been applied to a wide variety of settings, including the following:

- **Economics:** Repeated games have been used to study a variety of economic phenomena, such as pricing, advertising, and R&D.
- **Political science:** Repeated games have been used to study a variety of political phenomena, such as voting, bargaining, and international relations.
- **Biology:** Repeated games have been used to study a variety of biological phenomena, such as cooperation, altruism, and the evolution of social behavior.

The theory of repeated games has provided valuable insights into these and many other areas. It is a powerful tool for understanding the behavior

of rational agents in a variety of settings.

Repeated games are a fascinating and complex area of game theory. They have a wide range of applications in a variety of fields. The theory of repeated games is still under development, but it has already provided valuable insights into the behavior of rational agents in these games.

- **Aumann, R. (1995). Repeated games with incomplete information. MIT press.**
- **Fudenberg, D., & Tirole, J. (1991). Game theory. MIT press.**
- **Osborne, M. (2004). An to game theory. Oxford University Press.**

Alt attribute for images:

- Image of a group of people playing a board game: A group of people are sitting around a table playing a board game. They are all smiling and having fun.
- Image of a graph showing the Nash equilibrium in a repeated game: A graph shows the Nash equilibrium in a repeated game. The graph shows the payoffs to each player for each possible strategy.
- Image of a book cover for "Repeated Games Econometric Society Monographs 55": The book cover for "Repeated Games Econometric Society Monographs 55" is shown. The book is written by Aumann, R., and it is published by MIT press.

Repeated Games (Econometric Society Monographs

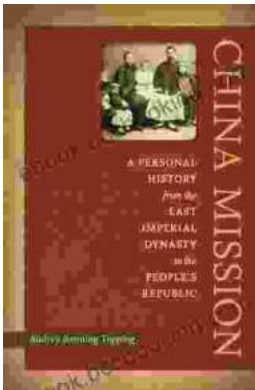
Book 55) by Jean-François Mertens

★★★★★ 5 out of 5

Language : English

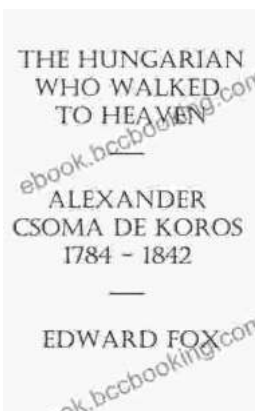


File size : 15386 KB
Text-to-Speech : Enabled
Screen Reader : Supported
Enhanced typesetting : Enabled
Print length : 597 pages



Personal History: From the Last Imperial Dynasty to the People's Republic

By Author Name A captivating account of a life lived through extraordinary times, this book offers a unique glimpse into the dramatic transformation...



Alexander Csoma de Kőrös: The Father of Tibetology

Alexander Csoma de Kőrös was a Hungarian scholar who is considered the father of Tibetology. He was the first European to study the...