Universidade Federal de Juiz de Fora
Faculdade de Economia
Dynamic Programming
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Course Outline

1. Theory of Dynamic Programming

    1.1 Overview

    1.2 Indirect Utility (Consumer and Firms)

    1.3 Dynamic Optimization: A Cake-Eating Example
    Direct Attack
    Dynamic Programming Approach

    1.4 Some Extensions of the Cake-Eating Problem
    Infinite Horizon
    Taste Shocks
    Discrete Choice

    1.5 General Formulation: Nonstochastic Case

    1.6 Stochastic Dynamic Programming

2. Numerical Analysis

    2.1 Stochastic Cake-Eating Problem
    Value Function Interations
    Policy Function Interactions

    2.2 Stochastic Discrete Cake-Eating Problem
    Value Function Interations

    2.3 Extensions: Larger State Spaces