Discount Factor and Optimal Policy
in the Leontief Two-Sector Growth Model
(Preliminary Version)

Minako Fujio[*]

May 2007

Abstract: This essay presents the existence of two important threshold discount factors, $\hat{\rho}$ and $1/\zeta$, and derives the associated optimal policies on the discounted optimal growth in a Leontief two-sector model. When the discount factor is below $\hat{\rho}$, the optimal policy has a 'tent' map shape and an optimal program possibly follows a multi-period cycle. When the discount factor is above $1/\zeta$, the optimal policy derived in the undiscounted case is optimal and an optimal program always converges to the modified golden rule capital stock.

(82 words)

Journal of Economic Literature Classification Numbers: D90, C62, O21.

Key Words: Two-sector Leontief model, optimal policy, discount factor, geometry, .

Running Title: Discount Factor and Optimal Policy

---
[*]Department of Economics, Otaru University of Commerce, Hokkaido, Japan