

# Endogenous time preference and endogenous growth: Uzawa meets Becker and Mulligan

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January 18, 2011

## Abstract

This paper incorporates the Uzawa-type time preference with the Becker-and-Mulligan-type time preference. In addition, this paper also introduces externalities—consumption externalities and investment externalities—into the time preference. Consumption externalities and investment externalities in the time preference capture the “jealousy” effect and the “spillover” effect, respectively. Under this setting, we construct the one-sector AK model and mainly analyze the stability in terms of the phase diagram. As a result, we find that as both the influence of externalities on the time preference and the intertemporal elasticity of substitution get larger and the slope of the subjective discount curve gets smaller, it is more likely that there exist the multiple balanced growth path equilibria in which one of them is saddle path stable and indeterminate and the other is unstable and determinate.

**Keywords:** Uzawa-type time preference; Becker-and-Mulligan-type time preference; Consumption and investment externalities; Global stability

**JEL classification:** E32; H23; O40

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