

# **A Nonlinear Estimation of Economies with Recursive Preferences**

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## **Abstract**

This paper investigates the riskiness of investment in tangible and intangible capital in a two-sector economy populated with households who have recursive preference and care for risk-return trade off in the long run. We employ the second-order perturbation method to solve the model, and use the particle filter to estimate the model and time series of investment returns on tangible and intangible capital.

*Keywords:* Intangible capital, recursive preference, particle filter