

Intertemporal Elasticity of Substitution with Leisure Margin

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Abstract

This paper investigates whether the estimation of the intertemporal elasticity of substitution of consumption (IES) would be affected when leisure time is allowed to vary. To this end, we adopt a utility specification that allows interactions between consumption and leisure and estimate IES using a pair of Euler equations. We find that the IES estimates that allow leisure to respond to the market interest rate are consistently lower than the IES estimates using the conventional method that keeps leisure constant. We show that time spent on home production explains majority of the difference between the two IES estimates due to the higher substitutability of home production time, particularly the childcare component, compared with other leisure time. When we exclude home production from nonmarket time, we find the IES estimates become larger. Our findings demonstrate the importance of time allocation when individuals make decisions on consumption and saving.

Keywords: time allocation, labor supply, earning

JEL code: E21 (Consumption), D91 (Intertemporal household choice), J22 (Time allocation and labor supply)

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