

Comparative Impatience under Random Discounting^{*}

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Abstract

Time preference has been measured as the magnitude of the discount factor, which is elicited from choices among consumption streams with a time trade-off. This elicitation implicitly assumes that choices are made under commitment. In sequential decision making, however, the degree of impatience may be affected by two potentially conflicting effects: one is pure time preference, which is a preference for early consumption, and the other is preference for flexibility, which is a desire to leave one's options open until a future time period. We extend impatience comparisons to choices over opportunity sets. We hypothesize that an agent exhibits a preference for flexibility because of random time preference, and we show that the relative degree of impatience is measured as a probability shift of the random time preference in the *monotone likelihood ratio order*, which is characterized via impatience comparisons among opportunity sets having a time trade-off. The characterization result is applied to comparative statics in (i) the demand for money, (ii) Wicksell's tree-cutting problem, and (iii) technology and the saving-rate choice.

Keywords: time preference, preference for flexibility, comparative impatience, random discounting, monotone likelihood ratio order.

JEL classification: D11, D81, D91.

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