Optimal Initial Capital Induced by the Optimized Certainty Equivalent[*]

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Abstract

This paper proposes the notion of optimal initial capital (OIC) induced by the optimized certainty equivalent (OCE) discussed in Ben-Tal and Teboulle (1986) and Ben-Tal and Teboulle (2007), and investigates the properties of the OIC with various types of utility functions. By providing its several properties with different utility functions or other assumptions, we successfully present the OIC as a monetary utility function (negative value of risk measure) for future payoffs with the decision-maker's concrete criteria in the background.

Keywords: optimal initial capital, optimized certainty equivalent, monetary utility function, prudence premium.

JEL classification: D81, G32, G11, D46,