Chapter 6

Explicit Solution of a General Consumption/Portfolio Problem with Subsistence Consumption and Bankruptcy

(with M. I. Taksar and E. L. Presman)

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Abstract. This paper solves a general continuous-time single-agent consumption and portfolio decision problem with subsistence consumption in closed form. The analysis allows for general continuously differentiable concave utility functions. The model takes into consideration that consumption must be no smaller than a given subsistence rate and that bankruptcy can occur. Thus the paper generalizes the results of Karatzas, Lehoczky, Sethi and Shreve (1986).