

A second solution to the ultimate challenge of financial economics

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Abstract

In this paper, I describe a second solution to
the ultimate challenge of financial economics.
The paper ends with "The End"

Introduction

In a previous paper, I've described
the ultimate challenge of financial economics, namely:
Find two discount factors $f(r_f, p)$ and $g(r_f, p)$ such that

$$f(r_f, p) = g(r_f, p) \iff (r_f = 0) \wedge (p = 0)$$

In a previous paper, I've described a solution to
the ultimate challenge of financial economics.
In this paper, I describe a second solution to
the ultimate challenge of financial economics.

A second solution to the ultimate challenge of financial economics

Define

$$s(x) = \begin{cases} 1 - x^2 & -1 \leq x \leq 1 \\ 0 & x < -1 \vee x > 1 \end{cases}$$

Then, a second solution to the ultimate challenge of financial economics is:

$$f(r_f, p) = s(p^2 + r_f^2) - 1$$

$$g(r_f, p) = 1 - s(p^2 + r_f^2)$$

The End