The alternative three discount factor theorem, its implication and the question it poses

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the alternative three discount factor theorem, its implication and the question it poses. The paper ends with "The End"

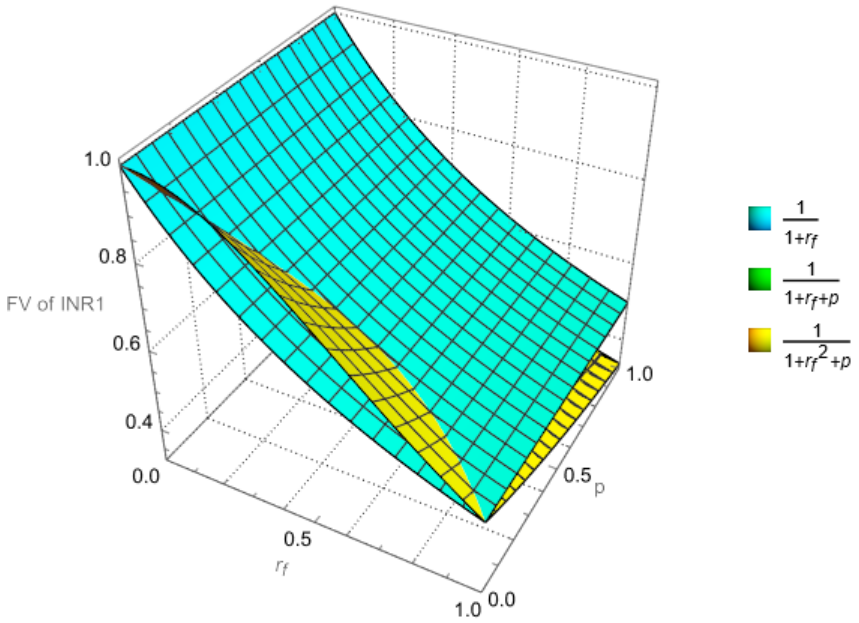
Introduction

In a previous paper, I've described discount factors, the four discount factor theorem and its implication.
In a previous paper, I've described the three discount factor theorem, its implication and the question it poses.
In this paper, I describe the alternative three discount factor theorem, its implication and the question it poses.

The alternative three discount factor theorem

The alternative three discount factor theorem states

$$\frac{1}{1+r_f} = \frac{1}{1+r_f+p} = \frac{1}{1+{r_f}^2+p} \iff ((r_f = 0) \wedge (p = 0)) \vee ((r_f = 1) \wedge (p = 0))$$



The implication of the alternative three discount factor theorem

The implication of the alternative three discount factor theorem is that **exactly** three discount factors are **sufficient** to obtain **exactly** two economies:
one with a zero risk-free rate and a zero risk premium and the other with a risk-free rate of one and zero risk premium.

The question the alternative three discount factor theorem poses

Should we eliminate the remaining economies or not?
That's the question the alternative three discount factor theorem poses!

The End