

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

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## Abstract

In this paper, I describe the ideal 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.

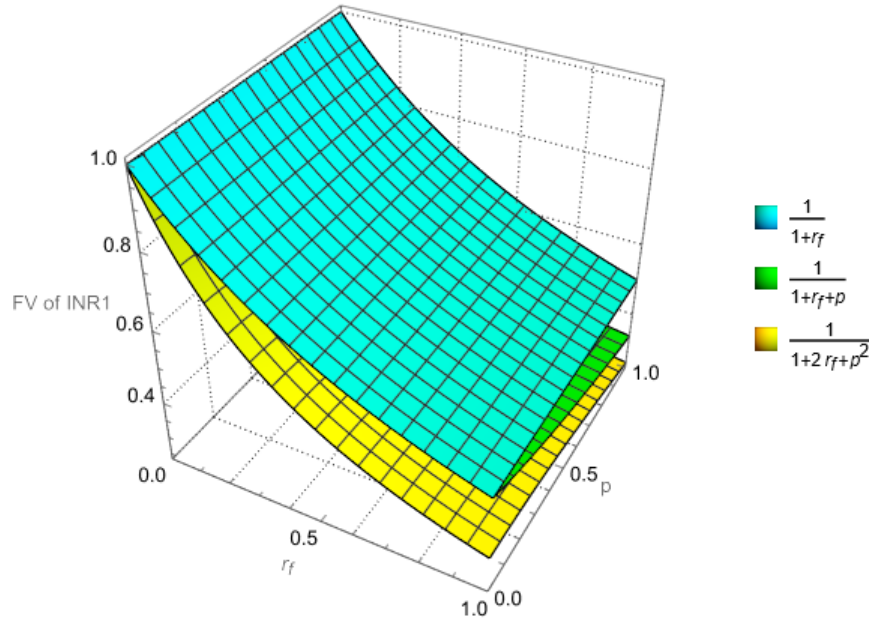
In a previous paper, I've described the alternative three discount factor theorem, its implication and the question it poses.

In this paper, I describe the ideal three discount factor theorem, its implication and the question it poses.

## The ideal three discount factor theorem

The ideal three discount factor theorem states

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



## The implication of the ideal three discount factor theorem

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

## The question the ideal three discount factor theorem poses

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

**The End**