A probabilistic form of my war-time pattern-for-match of the risk-free rate

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Abstract

In this paper, I describe a probabilistic form of my war-time pattern-for-match of the risk-free rate.
The paper ends with "The End"

Introduction

In a previous paper, I've described my war-time pattern-for-match of the risk-free rate. In this paper, I describe a probabilistic form of my war-time pattern-for-match of the risk-free rate.

A probabilistic form of my war-time pattern-for-match of the risk-free rate

Solving my war-time pattern-for-match of the risk-free rate for r_e gives

$$r_e = r_f + \frac{r_f}{a(1+r_f)} - \frac{br_f + c}{a}$$

We model the variables as follows:

$r_e = LN[\theta, \phi]$

$r_f = LN[\Theta, \Phi]$

$r_a = N[\mu, \sigma]$

$r_b = N[\nu, \tau]$

$r_c = N[\omega, \upsilon]$

which gives the equation

$$\left(\begin{cases} \frac{e^{-\frac{(\log(x)-\theta)^2}{2\phi^2}}}{\sqrt{2\pi x\phi}} & x > 0 \\ 0 & x \leq 0 \end{cases} \right) + \frac{\sigma e^{\frac{1}{2}\left(\frac{(x-\mu)^2}{\sigma^2} - \frac{(x-\omega)^2}{\upsilon^2}\right)}}{\upsilon} = \left(\begin{cases} \frac{e^{-\frac{(\log(x)-\Theta)^2}{2\Phi^2}}}{\sqrt{2\pi x\Phi}} & x > 0 \\ 0 & x \leq 0 \end{cases} \right) \left(\sigma e^{\frac{(x-\mu)^2}{2\sigma^2}} \left(\frac{\sqrt{2\pi}}{\left(\begin{cases} \frac{e^{-\frac{(\log(x)-\Theta)^2}{2\Phi^2}}}{\sqrt{2\pi x\Phi}} & x > 0 \\ 0 & x \leq 0 \end{cases} \right) + 1} - \frac{e^{-\frac{(x-\nu)^2}{2\tau^2}}}{\tau} \right) + 1 \right)$$

Solutions to the probabilistic form of my war-time pattern-for-match of the risk-free rate

There exist at least 2 solutions to the probabilistic form of my war-time pattern-for-match of the risk-free rate, available upon request.

The End