An effective money function

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Abstract

In this paper, I describe an effective money function.
The paper ends with "The End"

Introduction

Because **money functions** need to be **tractable**, they can't be too simple nor too complex.

In this paper, I describe an effective money function.

Differential equations for an effective money function

Differential equations for an effective money function are:

$$\frac{\partial r(t)}{\partial t} = 3at^2 + 2bt + c$$

$$\frac{\partial M(t)}{\partial t} = -r(t)(T-t)M(t)$$

where

t is time
T is time of an **event**
a, b, c are constants
$r(t)$ is the money rate
$M(t)$ is the money function

An effective money function

A solution to the differential equations above is:

$$r(t) = at^3 + bt^2 + ct + d$$

$$M(t) = M_0 e^{\frac{1}{60}t\left(12at^4 - 15at^3T + 15bt^3 - 20bt^2T + 20ct^2 - 30ctT + 30dt - 60dT\right)}$$

where

d is a constant of integration
M_0 is the initial amount of money

The End