

Collected papers  
of

Lord Soumadeep Ghosh

Volume 7

# Time-consistent oliGARCHy

Soumadeep Ghosh

Kolkata, India

## Abstract

In this paper, I describe the time-consistent oliGARCHy using identical oliGARCHes, numeraire, money and a point in time. The paper ends with "The End"

## Introduction

In a previous paper, I've described the oliGARCH model of an individual's wealth. In a previous paper, I've described how there are 729 oliGARCHes in the economy. Contrary to popular belief, a time-consistent oliGARCHy is possible using identical oliGARCHes, numeraire, money and a point in time. In this paper, I describe the time-consistent oliGARCHy using identical oliGARCHes, numeraire, money and a point in time.

## The time-consistent oliGARCHy using identical oliGARCHes, numeraire, money and a point in time.

Recall the wealth of an individual in the oliGARCH model is

$$W(t) = \frac{2ac\sigma - 2b\sigma(ct + d) - \sqrt{\frac{2}{\pi}}be \exp(-\frac{(x-\mu)^2}{2\sigma^2})}{2b^2\sigma} + f \exp(-\frac{bt}{a})$$

The time-consistent oliGARCHy is given by the equation

$$nW(t) = \int_0^T \int_0^m W(t) dx dt$$

where

$n = 729$

$x$  is the numeraire

$m$  is money

$W(t)$  is the wealth of identical oliGARCHes at time  $t$

$T$  is a point in time

## Real solutions to the equation

There exist at least 7 real solutions to the equation above, available upon request.

## The End

# The theory of value investing

Soumadeep Ghosh

Kolkata, India

## Abstract

In this paper, I describe the theory of value investing. The paper ends with "The End"

## Introduction

Knowledge has been demanded of me of the theory of value investing. In this paper, I describe the theory of value investing.

## The theory of value investing

**Value**  $V$  is defined by the equation

$$V = (1 - V) + \ln(1 - V)$$

which can be solved to get

$$V = \frac{1}{2}(2 - W(2e)) \approx 0.31258874$$

where

$W(x)$  gives the principal solution for  $w$  in  $z = we^w$

**The theory of value investing** states

$$\frac{P + p}{1 + r_f - q} + \frac{P}{1 + r_f} + \frac{P - l}{1 + r_f + q} = VP$$

where

$P$  is price of good and/or service

$p$  is profit on good and/or service

$l$  is loss on good and/or service

$r_f$  is the risk-free rate

$q$  is the trade premium

$V$  is value described above

## Solution to the theory of value investing

There exists at least 1 real solution to the equation above, available on request.

## The End

# Understanding value judgments and beyond

Soumadeep Ghosh

Kolkata, India

## Abstract

In this paper, I describe how to understand value judgments. The paper ends with "The End"

## Introduction

In a previous paper, I've described value and the theory of value investing. Value judgments arise when the value equation is changed by the introduction of a risk-free rate. In this paper, I describe how to understand value judgments for economists, psychologists and psychiatrists.

## The value judgment system in an individual

The value judgment system in an individual is given by

$$V = (1 - V) + r_f \ln(1 - V)$$

$$p + r_f o + r_f^2 n == V$$

$$r_f p + r_f^2 o + n == V$$

$$r_f^2 p + o + r_f n == V$$

where

$p$  is positive value judgment

$o$  is original value judgment

$n$  is negative value judgment

$r_f$  is the risk-free rate

## Understanding value judgments

Solving the system above gives us

$$p = \frac{V \ln^2(1 - V)}{4V^2 - 4V + \ln^2(1 - V) + 2V \ln(1 - V) - \ln(1 - V) + 1}$$

$$o = \frac{V \ln^2(1 - V)}{4V^2 - 4V + \ln^2(1 - V) + 2V \ln(1 - V) - \ln(1 - V) + 1}$$

$$n = \frac{V \ln^2(1 - V)}{4V^2 - 4V + \ln^2(1 - V) + 2V \ln(1 - V) - \ln(1 - V) + 1}$$

$$r_f = \frac{2V - 1}{\ln(1 - V)}$$

which must be understood as pyramidal effects of the risk-free rate.

## Beyond

We eliminate value  $V$  from the system above to get the eliminant

$$\exp(2n + \frac{2o-1}{r} + 2pr) + r(n+pr) + o = 1 \wedge (r-1)(nr+o-p(r+1)) = 0 \wedge (r^3-1)(n-p) = 0$$

which gives us the structure of value judgements.

## The End

# Time-consistent discounted oliGARCHy

Soumadeep Ghosh

Kolkata, India

## Abstract

In this paper, I describe the time-consistent discounted oliGARCHy using identical oliGARCHes, numeraire, money, discount rate and a point in time. The paper ends with "The End"

## Introduction

In a previous paper, I've described the oliGARCH model of an individual's wealth. In a previous paper, I've described how there are 729 oliGARCHes in the economy. In a previous paper, I've described the discounted oliGARCHy using identical oliGARCHes, numeraire, money and discount rate. In a previous paper, I've described the time-consistent oliGARCHy using identical oliGARCHes, numeraire, money and a point in time. Contrary to popular belief, a time-consistent discounted oliGARCHy is possible using identical oliGARCHes, numeraire, money, discount rate and a point in time. In this paper, I describe the time-consistent discounted oliGARCHy using identical oliGARCHes, numeraire, money, discount rate and a point in time..

## The time-consistent discounted oliGARCHy using identical oliGARCHes, numeraire, money, discount rate and a point in time.

Recall the wealth of an individual in the oliGARCH model is

$$W(t) = \frac{2ac\sigma - 2b\sigma(ct + d) - \sqrt{\frac{2}{\pi}}be \exp(-\frac{(x-\mu)^2}{2\sigma^2})}{2b^2\sigma} + f \exp(-\frac{bt}{a})$$

The time-consistent discounted oliGARCHy is given by the equation

$$n(W(t) + \frac{W(t)}{1+r} + \frac{W(t)}{(1+r)^2}) = \int_0^T \int_0^m (W(t) + \frac{W(t)}{1+r} + \frac{W(t)}{(1+r)^2}) dx dt$$

where

$$n = \frac{729}{3}$$

$x$  is the numeraire

$m$  is money

$W(t)$  is the wealth of identical oliGARCHes at time  $t$

$T$  is a point in time

$r$  is the discount rate

## Real solutions to the equation

There exist at least 7 real solutions to the equation above, available upon request.

## The End

# 729 solutions to the oliGARCH model

Soumadeep Ghosh

Kolkata, India

## Abstract

In this paper, I describe 729 solutions to the oliGARCH model. The paper ends with "The End"

## Introduction

In a previous paper, I've described the oliGARCH model of an individual's wealth. In this paper, I describe 729 solutions to the oliGARCH model.

## 729 solutions to the oliGARCH model

Recall the wealth of an individual in the oliGARCH model is

$$W(t) = \frac{2ac\sigma - 2b\sigma(ct + d) - \sqrt{\frac{2}{\pi}}be \exp(-\frac{(x-\mu)^2}{2\sigma^2})}{2b^2\sigma} + f \exp(-\frac{bt}{a})$$

729 solutions to the oliGARCH model are available at

<https://drive.google.com/file/d/13YHrHZ2jnNaL3SUc3MHQt1HOM3U3ZiYg/view>

## The End

Having read my papers, are you smart enough to understand  
the number 10206?

Soumadeep Ghosh

Kolkata, India

#### **Abstract**

In this paper, I describe the economic meaning of the number 10206. The paper ends with  
"The End"

## **Introduction**

Many individuals don't understand the economic meaning of certain numbers. In this paper, I  
describe the economic meaning of the number 10206.

## **The economic meaning of the number 10206**

Think of this number in terms of the population on your planet.

Hint 1:  $10206 = 14 \times 729$

Hint 2: 14 is the maximum number of sub-economies an economy can have.

Hint 3: 729 is the maximum number of oliGARCHes that can exist.

## **The End**



# Nicotine

Soumadeep Ghosh

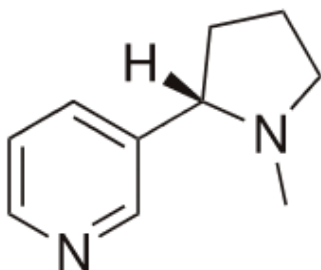
Kolkata, India

## Abstract

In this paper, I describe nicotine. The paper ends with "The End"

## Introduction

**Nicotine** is an alkaloid that is used as a stimulant and an anxiolytic.



## Source of nicotine

Nicotine is naturally produced in the nightshade family of plants, mainly tobacco and pituri.

## Use in warfare

Nicotine finds use in warfare to soothe the nerves of soldiers and keep them active.

## The End

# Hash

Soumadeep Ghosh

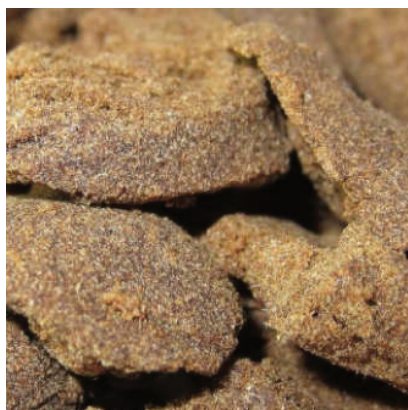
Kolkata, India

## Abstract

In this paper, I describe hash. The paper ends with "The End"

## Introduction

**Hash** is a cannabis concentrate made by compressing and processing parts of the cannabis (also known as marijuana) plant, typically focusing on flowering buds containing the most hairy projections.



## Use in warfare

Hash finds use in warfare to desensitize soldiers to violence.

## The End

# The Jagannath function and the three properties of the Jagannath function

Soumadeep Ghosh

Kolkata, India

## Abstract

In this paper, I describe the Jagannath function and the three properties of the Jagannath function. The paper ends with "The End"

## Introduction

The Jagannath function is the holy grail of functions. In this paper, I describe the Jagannath function and the three properties of the Jagannath function.

## The Jagannath function

The Jagannath function is

$$J(x) = \begin{cases} 1 & x = -\frac{3}{\sqrt{2}} \\ 0 & x \neq -\frac{3}{\sqrt{2}} \end{cases} + \begin{cases} 1 & x = 0 \\ 0 & x \neq 0 \end{cases} + \begin{cases} 1 & x = \frac{3}{\sqrt{2}} \\ 0 & x \neq \frac{3}{\sqrt{2}} \end{cases}$$

## Three properties of the Jagannath function

The three properties of the Jagannath function are

1.

$$\sum_{-\infty}^{\infty} J(x) = 1$$

2.

$$\frac{\partial J(x)}{\partial x} = 0$$

3.

$$\int_{-\infty}^{\infty} J(x) dx = 0$$

**The End**

# The Tirupati function and the three properties of the Tirupati function

Soumadeep Ghosh

Kolkata, India

## Abstract

In this paper, I describe the Tirupati function and the three properties of the Tirupati function. The paper ends with "The End"

## Introduction

The Tirupati function is the alternative holy grail of functions. In this paper, I describe the Tirupati function and the three properties of the Tirupati function.

## The Tirupati function

The Tirupati function is

$$T(x) = \left\{ \begin{array}{ll} -\frac{1}{3} & x = -\frac{1}{3} \\ 0 & x \neq -\frac{1}{3} \end{array} \right. + \left\{ \begin{array}{ll} \frac{1}{3} & x = \frac{1}{3} \\ 0 & x \neq \frac{1}{3} \end{array} \right.$$

## Three properties of the Tirupati function

The three properties of the Tirupati function are

1.

$$\sum_{-\infty}^{\infty} T(x) = 0$$

2.

$$\frac{\partial T(x)}{\partial x} = 0$$

3.

$$\int_{-\infty}^{\infty} T(x) dx = 0$$

**The End**