Ghosh's procedure for empirical pricing of a general derivative

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe my procedure for empirical pricing of a general derivative. The paper ends with "The End"

Introduction

In this paper, I describe my procedure for empirical pricing of a general derivative. This procedure is to be used only if and when all remaining procedures are either unsuitable or unusable due to insufficient data.

Ghosh's procedure for empirical pricing of a general derivative

Using an adequate sample of past prices, we first regress the specification

$$D = aB + bS + (1 - a - b)LD$$

where

a is the regression coefficient of the national bond index B b is the regression coefficient of the national stock index S L is the leverage coefficient of the derivative D (1-a-b) is the regression coefficient of the leveraged derivative LD Note that there is no residual term in the specification.

Then, the empirical price of the general derivative D is

$$D = \frac{aB + bS}{1 + (a+b-1)L}$$

The End