Un approccio metrico per lo studio dei dati finanziari

Luca Grilli
Dipartimento di Scienze Economiche, Matematiche e Statistiche,
Università degli Studi di Foggia,
Via IV Novembre 1, I-71100 Foggia, Italy
e-mail: l.grilli@unifg.it

Abstract

In this paper I present a time series analysis based on a metrical approach. I use a definition of distance which depends on the sample correlation coefficient among bonds. The dataset consists on daily returns of US treasury bonds. By mean of a Linkage-Algorithm bonds are classified according to the distance which show the cluster structure. It is evident how the cluster structure depends strongly on maturity date, bonds are classified in three different clusters, one of them consists on long term bonds. The analysis is focused on long term bonds, introducing a modified time series, I show how is possible to evidentiate a complex cluster structure even in this class of bonds.

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