

## Rete della ricerca socio-economica Ciclo di seminari 2014

Lunedì 7 aprile 2014  
ore 10:00 - 11:30  
ISTAT - Piazza dell'Indipendenza, 4  
*Sala Baffi*

### **Forecasting Time Series with Long Memory and Nonlinearities: A Markov Switching Approach**

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#### **Discussant**

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#### **Nodo di ricerca**

Modelli Macroeconomici

#### **Abstract**

Many studies show that switching models and long memory processes are difficult to identify and can be confused, thus it is worthwhile to try to capture both features into a single time series model to be able to assess their relative importance.

Accordingly, we consider a model that simultaneously captures long memory and Markov switching dynamics and analyze its forecast performance using a series of Monte Carlo experiments.

Results reveal that this model is less sensitive to model misspecifications and produces superior forecasts over those obtained from nested models. We examine if simulation results are consistent with empirical data using the U.S monthly Consumer Price inflation rate over the period 1970-2010.