

Abstract

Bruno Damásio

October 11, 2018

This presentation is about Markov chains and their role in economics and in econometrics theory. Four essays on the Markov chain approach are discussed.

We start by illustrating the analytical potential of multivariate Markov chains in the field of economic history, in particular with regard to a test of the Schumpeterian hypothesis of creative destruction.

Then, we illustrate the flexibility of Markov chains, and their pertinence to situations that go beyond their traditional applicability: i) how can a Markov chain play the role of covariates; ii) how can a Markov chain representation be useful to compute expected hitting times.

Finally, we present a new methodology for testing and detecting multiple structural breaks in multivariate Markov chains, where the dates at which the structural breaks occur are unknown.