

Evaluating Some Non-linear Dynamic Models of Asset Prices

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The paper looks at some models of non-linear dynamics that have been proposed to explain the evolution of financial asset prices. These models tend to be either of the purely statistical variety or have some economic structure to them in order to enable one to present an interpretation of the observed outcomes. The latter generally involve models of a discrete number of different classes of traders. Common to them are the classes of momentum traders (chartists) and fundamentalists. We will consider the ability of these models to fit the data using a variety of parametric and non-parametric methods. These are proposed as encompassing tests and ask whether the models can encompass some features of the data. Such tests have been in existence for some time but we suggest some new ones that might be employed that work with binary random variables that are constructed from the realized data sets.