

## **Non-linear predictability in G7 stock index returns**

### **Abstract**

This paper re-examines the persistence and source of non-linear predictability in the stock markets of G7 countries. Applying the Brock-Dechert-Scheinkman (BDS) test on autoregression (AR)-filtered returns in rolling estimation windows, we find evidence of local non-linear predictability in all the sampled stock markets. To identify the source, we apply the BDS test on AR-generalized autoregressive conditional heteroskedasticity (GARCH)-filtered returns in rolling windows. After accounting for conditional heteroskedasticity, we still find brief time periods with non-linear predictability in all markets, contradicting the weak-form efficient markets hypothesis.