





High Dimensional Nonstationary Time Series IRTG 1792 Short Course

Andrew Vivian

Commodity Markets: Risk Management and Forecasting

Commodity markets play a crucial role in the economy. They have facilitated trade between producers and consumers for centuries. More recently commodities have also been utilised by investors as a diversification tool in what is deemed "Financialisation" with \$bn's invested in commodity funds as well as the establishment of the carbon trading markets aimed to help tackle climate change.

The course will focus on real-time risk management and forecasting within the setting of Commodity markets. In terms of risk management we will look at ways to hedge positions to reduce risk including methods to reduce downside risk and thereby avoid extreme losses. A major issue here is the vast fluctuations in model estimates of volatility and correlation over time. For forecasting we will examine techniques to address model uncertainty and parameter instability. Some suggestions for future research will be given.



Andrew Vivian is Professor of Finance at Loughborough University. His research interests are in the areas of Investments, Empirical Finance, Commodities and Market Efficiency. He is especially interested in modelling and forecasting financial time series with an emphasis on practical applications which can lead to implementable strategies. Andrew is an Associate Editor at the European Journal of Finance and has helped establish a research network on Financial Data Science.

Prof. Vivian previously taught at the University of St. Andrews and at Durham University where he studied degrees in Economics and in Finance as well as his PhD. Harvard University, and an engineering degree from Ecole Polytechnique and one from Ecole des Mines de Paris.

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