

## 2009 School Seminar Series

Waikato Management School  
Te Raupapa



# Modelling Financial Markets: Long Memory or Shifting Means?

Wednesday, 25 March 2009  
1.10pm – 2:00pm  
MSB.0.01

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### **Abstract**

Much of the empirical finance literature suggests that the time series data used in their modeling, estimation and testing, are fractionally integrated and hence have 'long memory'. This follows from the seminal contribution of Granger and Joyeux (1980). In this paper we will i) show how 'long memory' and 'shifting means' are 'observationally equivalent'; ii) show that in much of the finance theory, 'long memory' does not make theoretical sense; iii) present some empirical examples which suggest the data are characterized by 'shifting means' rather than 'long memory'; iv) present evidence to show that not all estimators of the long memory process are 'created equal' and which you choose, 'makes a difference'. If time permits we will also present a new test of 'H self-similarity'.

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