

## **Modelling ecologies of financial investors**

### **Sciteb MSc Group Problem**

Analyse the dynamics of a model of asset pricing [BBM], the effects of extensions, and see what you can infer from data to be provided by Aviva.

In particular,

- explain the observed threshold for instability
- calculate the returns of each strategy and allow for resulting evolution of the mix of strategies
- investigate the effects of diversity
- add other types of trader
- decide which effects are robust and which are artefacts of an over-simple model
- find the effects of movements of the fundamental value
- seek to infer parameters from data and how well different models fit

[BBM] Beale N, Battey H, MacKay R, Exploring the impact of momentum investment on financial stability (draft, 17 Nov 2016)

[http://www2.warwick.ac.uk/fac/sci/math/people/staff/robert\\_mackay/introducingvalmorandv1p2.pdf](http://www2.warwick.ac.uk/fac/sci/math/people/staff/robert_mackay/introducingvalmorandv1p2.pdf) [not for distribution]

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