



## **Emotional Finance proof of concept: exploiting stock market anomalies and identifying undervalued and overvalued stocks**

### **Outline**

Emotional Finance is an emerging field which combines finance, psychology and statistics to provide unique insights into market and investor behaviour by understanding the powerful unconscious processes and wish-fulfilling fantasies that play a key role in driving all financial decisions.

This emotional finance understanding of investor unconscious needs and fantasies shows how it is possible to explain the existence of systematic market mispricing of stocks with particular emotion-generating characteristics including their propensity to attract investors with gambling propensities, particularly in the bad news domain.

Many years of research at Warwick Business School, Edinburgh University and elsewhere have resulted in algorithms and statistical models which are able to identify many such stock market “anomalies” which can be systematically exploited to identify practical trading opportunities.

### **Objectives**

The purpose of this proof of concept is to demonstrate the effectiveness of Emotional Finance algorithms and approaches to identify stocks with particular “anomalous” characteristics that lead them to be mispriced often for quite a period of time.

There will be a consolidation of relevant news and other data sources, and the application and tuning of the algorithms and predictive models to identify tradeable “target” stocks using historical data. After back-testing, the models will be applied for forwards predictive capability in a live trial.

### **Project outline**

- Week 1: Scoping and statement of work, identifying typical anomalies to work with
- Weeks 2-3: Sourcing and consolidation of news and other relevant data
- Weeks 4-8: Application and tuning of existing algorithms and predictive models
- Weeks 9-10: Back-testing and further systems refinements
- Weeks 11-12: Forward testing of final models and presentation of trading results

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Indicative timescale: 3 months