FINM3407 - Behavioural Finance

Tutorial 8 Questions/Answers - Behavioural Explanations for Anomalies

Note: This topic has more questions than can be covered in a 2-hour session. The questions to be covered by your tutor are indicated by an asterisk (*); the rest questions should be viewed as extra practice problems.

In this tutorial, we are going to cover the following topics: Behavioural Explanations for Anomalies and a CFA Question

There are a few references reading for these relevant topics:

AckertDeaves Chapters 13

- **Part One: Behavioural Explanations for Anomalies**

1*. Differentiate the following terms/concepts:

a. Momentum and reversal

b. Mean-reversion and continuation scenarios in the Barberis-Shleifer-Vishny (BSV) model

c. Size factor and book-to-market factor

d. Risk-based and behavioural explanations (for anomalies)

2*. In the context of the BSV model, explain intuitively (nontechnically) why two consecutive earnings changes in the same direction make investors less likely to think that they are in regime 1 (mean-reversion) vs. the case of two earnings changes in alternate directions.

3. In the chapter example of the DHS model, in one of the two cases even rational investors overreacted. This implies that overreaction is rational. Comment.

4*. Again, using the DHS model, suppose that θ=1; σ_θ^2=1; σ_ε^2 =2; σ_C^2=1; and s_1=2.

Describe and comment on the path of prices when overconfident investors determine prices vs. the rational path of prices.

Note: The question is based on the DHS model, which likely refers to the model proposed by Daniel, Hirshleifer, and Subrahmanyam (1998). This model studies how investor overconfidence (OC) affects asset prices.

The parameters given are:

θ=1: This is the true value of the signal or the real fundamental value.

σ_θ^2=1: The variance of the signal.

σ_ε^2 =2: The variance of the noise.

σ_C^2=1: The error variance for overconfident investors.

s_1=2: This could be the received signal.

S1 = θ + ε

2 = 1 + ε

ε = 1

5*. Momentum is the anomaly that gives those subscribing to efficient markets the most trouble. Explain.

6*. A series of Questions related to Factor Zoos:

(a) What is Factor Zoo?

(b) What is the development of academic research related to the "Factor Zoo"?

- **Part Two: CFA Question - How Behavioural Finance Influences Market Behaviour**

7. Anicée Ly is a portfolio manager for a bank and prepares for meetings with two new clients. Based on a completed risk tolerance questionnaire, Ly concludes that the first client, Rufus Olssen, is moderately risk averse with a mental accounting bias. Olssen desires capital growth with a small amount of income. Ly presents Olssen with the following two portfolios: Portfolio 1: 100% in a global balanced fund that is mean-variance optimized. Portfolio 2: 25% in CDs, 25% in a global bond index fund, 35% in a global equity index fund, and 15% in a high-risk, actively managed, micro-cap equity fund. Both portfolios provide the same level of income and expected return, and the portfolios have the same Sharpe ratio.

a) Determine, assuming Ly's biased conclusion is correct, which portfolio Olssen would most likely select. Justify your response.

Determine, assuming Ly's biased conclusion is correct, which portfolio Olssen would most likely select. (Circle one)	
Portfolio 1	***Portfolio 2***
Justify your response	

The second client, Verochka Calderón, gives Ly a list of the four highest-performing funds in her defined contribution plan and asks Ly to recommend an allocation. After Calderón completes a risk tolerance questionnaire, Ly determines that Calderón likely exhibits framing and regret biases. Using the four funds, Ly suggests two allocations, presented in Exhibit

Exhibit 1

Suggested Defined Contribution Plan Allocations

	Allocation A	**Allocation B**
Fund 1	25%	50%
Fund 2	25%	30%
Fund 3	25%	10%
Fund 4	25%	10%
Sharpe Ratio	0.4	0.4

b) Determine, assuming Ly's determination of Calderón's biases is correct, which portfolio Calderón would most likely select. Justify your response.

Determine, assuming Ly's determination of Calderón's biases is correct, which portfolio Calderón would most likely select. (Circle one)	
Allocation A	***Allocation B***
Justify your response	