FINM3407 - Behavioural Finance

Tutorial 7 Emotional Foundations and Individual Investors

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: Application to Managerial Overconfidence and Stata related questions.

There are a few references reading for these two relevant topics:

AckertDeaves Chapters 7 and Chapter 10

- **Part One: Emotional Foundations**

1*. Differentiate the following terms/concepts/individuals:

a. IQ and EQ

The intelligence quotient (IQ) measures a person's intelligence, whereas the emotional quotient (EQ) measures a person's ability to identify and manage emotional responses.

b. Mood and emotion

A mood is a general feeling that does not focus on anything in particular, whereas an emotion is a mental and physiological state defined by observable features.

c. Human brain and the brain of other animals

The cerebrum is what distinguishes the human brain from those of other vertebrate animals. The cerebrum gives humans the ability to plan which is a big advantage over other animals.

d. Phineas Gage and Elliot

Phineas and Elliot lived in very different times, but both experienced brain damage that had a significant impact on their behavior. Based on case studies of patients like Phineas and Elliot, Damasio and other scientists conclude that emotion has an important influence on reasoning.

2*. You are considering managing your own money rather than trusting in an investment advisor. Some argue that emotional intelligence may be just as important as investment knowledge. Do you agree? Discuss.

Answers can vary for this question depending on the student's evaluation of their own investment expertise. Students should recognize that IQ and EQ are both important for success.

3. Imagine you just won a lottery with a $10 million prize. What primary emotions might you feel? (Note that the seven primary emotions generally include anger, contempt, disgust, fear, happiness, sadness, and surprise.) Describe their features, including the six used to define an emotion. Be sure to include observables.

According to Elster, J. (1998), the seven primary emotions include anger, contempt, disgust, fear, happiness, sadness, and surprise. Again students' answers may vary but they probably will identify happiness and, perhaps, surprise. They should then describe the observable features of the emotion they identify including cognitive antecedents, intentional objects, physiological arousal, physiological expressions, valence, and action tendencies.

4*. Your colleague argues that emotion and reasoning are completely separate influences on decision-making. Do you agree? Discuss.

As the chapter discusses, emotion and reasoning are not separate influences on the choices we make. Today psychologists recognize that emotions include cognitive, physiological, and overt behavioral elements. A person's reasoning is the result of a complex interaction of the mind and body, and an understanding of the process must include all aspects of the person.

5. Put yourself in the place of an equity mutual fund manager. Think of all the stocks you might select for inclusion in the portfolio. How would emotions enhance your decision-making process?

Emotions help the decision-maker sift through that mountain of available information and make a decision when one needs to be made.

- **Part Two: Individual Investors and the Force of Emotion**

1*. Differentiate the following terms/concepts:

a. Regret and disappointment

Regret and disappointment are negative emotions. When a person is disappointed he is unhappy about an outcome. With regret the person is also sorry about a decision that cannot be changed, but regret is a stronger emotion than disappointment.

b. House money and break-even effects

The house money effect is the willingness to take greater risk with money that was recently won, whereas the break-even effect refers to an increase in risk taking after a prior loss in order to try to break even.

c. Affect (noun) and affect (verb)

Affect (noun) refers to the quality of a stimulus and reflects a person's impression or assessment, whereas affect (verb) means to have an effect on an outcome.

d. Bad mood and depression

A mood is a general feeling that does not focus on anything in particular, whereas

depression has a biochemical basis and can occur with no cognitive appraisals.

2. In housing markets, there is a positive correlation between prices and trading volume. When there is a housing boom, many houses sell at, or even above, the prices asked by sellers. In times of bust, homes sit on the market for a long time with asking prices that exceed the prices that can reasonably be expected. How can this be explained?

The house money effect predicts that after a gain, the willingness to take greater risk increases so that investors and home owners will buy up houses. In the other hand, after losses are felt the snake-bit effect predicts an increase in risk aversion and people are less likely to buy.

3*. Some investment banks engage in proprietary trading, which means that the firm's traders actively trade financial securities using the bank's money, in order to generate a profit. To offset a slowdown in one division, traders in a profitable division might more actively engage in proprietary trading. Do you think this practice is wise?

When you play with other's money you might not make the same decisions as you would with your own.

4*. This morning I woke up in a sour mood because my favorite team lost its game yesterday. Then I had to wait an extra-long time in line for coffee. It started to rain, and I forgot my umbrella in the car. When I arrived at my office (finally) I found that a stock I held in my portfolio was falling in value, so I sold. Is this evidence that mood moves markets?

We don't really know that the bad mood caused me to sell. I might have sold because the market was falling, and I decided to follow the herd. I might have already been planning to sell.

5*. What does research based on the game show Deal or No Deal tell us about path-dependence and integration vs. segregation of gambles?

Contestants' decisions are strongly influenced by what has happened before. Consistent with house money and break-even effects, contestants take on more risk in response to changes in wealth. Evidence of path dependence was provided and suggests that gambles are integrated.

- **CFA Questions ***

Luca Gerber recently became the chief investment officer for the Ludwigs Family Charity, a mid-size private foundation in Switzerland. Prior to assuming this role, Gerber was a well-known health care industry analyst. The Ludwigs' family fortune is primarily the result of entrepreneurship. Gerhard Ludwigs founded ABC Innovations (ABC), a biotech company dedicated to small cell lung cancer research. The foundation's portfolio is fifteen percent invested in ABC. Gerber initially feels that fifteen percent investment in ABC is high. However, upon review, he decides it is appropriate based on Ludwigs' involvement and their past success with similar ventures. Gerber makes a mental note to himself to closely monitor the investment in ABC because he is not familiar with small-cap startup companies. The remaining 85 percent of the foundation's portfolio is invested in equity of high quality large-cap pharmaceutical companies. Gerber deems this allocation appropriate and is excited that he is able to continue to use his superior knowledge of the health care industry. For the past two years, ABC has been dedicated to Project M, an effort directed at developing a drug for the treatment of relapses in small cell lung cancer. Project M has delayed its Phase Two trials twice. Published results from Phase One trials have raised some concerns regarding the drug. In its last two quarterly investors' conference calls, ABC's CEO was very cautious in discussing expectations for Project M. ABC's stock price decreased by over 20 percent during the past six months. Gerber believes that the research setbacks are temporary because of ABC's past success with projects. He expects that ABC will begin Phase Two within a year, and also believes that once Project M goes into Phase Two, ABC's stock price should reach a new 52- week high of CHF 80. Soon after deciding to hold the stock, Gerber reads an article by ABC's chief scientist in which certain scientific results from Project M are detailed. As a conclusion, the article states: "Although we still have some major obstacles to overcome, the Project M team has seen positive signs that a treatment for small cell lung cancer is achievable." While Gerber has difficulty interpreting the scientific results, he feels reassured after reading the concluding statement. Today, ABC announces the news that it will no longer pursue Project M, citing early signs of failure of the project. As a result of the announcement, the stock price drops by

50 percent. Gerber is stunned. He reviews the company's history and notes that ABC has been up front about its struggles to solve the Project M issues. Gerber now realizes that he has been ignoring all the signs and feels a tremendous regret for not having sold the foundation's investment in ABC earlier.

1. **Discuss how Gerber displayed overconfidence bias and cite one example to support this statement. Distinguish between the availability bias and the overconfidence bias.**

Gerber displayed overconfidence bias by having too much faith in his "superior knowledge of the health care industry." Overconfidence bias and the related illusion of knowledge bias result when individuals overestimate their knowledge levels and abilities. Overconfidence bias has aspects of both cognitive and emotional errors but is classified as emotional because the emotional aspect dominates. Emotional biases, which stem from impulse or intuition, may be considered to result from reasoning influenced by feelings. These biases are difficult to correct. Overconfidence is primarily an emotional bias and is thus different from availability bias which is an information-processing bias and a cognitive error. Cognitive errors result from faulty reasoning and analysis. The individual may be attempting to follow a rational decision-making process but fails to do so because of cognitive errors. Gerber perceives the foundation's investment allocation and stock selection as appropriate, and does not process all of the information available to him. He notes that ABC should be monitored closely because of the fact he is not familiar with startup companies; however, he does not process information that goes beyond his knowledge base to see that the investment itself is problematic. Although the overconfidence and availability biases are clearly related, Gerber can make better investment decisions by focusing on the cognitive error aspects of his behavior. Cognitive biases are easier to correct for than emotional biases, which are based on how people feel.

2. **Discuss how Gerber displayed conservatism bias. Cite three examples from the reading?**

Conservatism bias, a cognitive error, is a belief perseverance bias in which people maintain their prior views or forecasts by inadequately incorporating new information. This cognitive error has aspects of both statistical and information-processing errors. Gerber displayed conservatism bias by maintaining his prior views on ABC without adequately incorporating new information. There are several examples of new information that was either ignored or inadequately considered:

- the delays in initiation of Phase Two trials.
- the discouraging results from Phase One;
- the cautionary language from the CEO; and

● the chief scientist's statement indicating that there were "major obstacles to overcome." Gerber disregarded all the negative news and cautionary language that was released by ABC. Gerber failed to incorporate the new information into his analysis of ABC. The impact was a loss to the foundation, which could have been reduced had Gerber incorporated the information into his analysis and adjusted the foundation's holdings of ABC.