FINM3407 - Behavioral Finance

Tutorial 2 Questions

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 relevant topics: Prospect Theory and Agency Theory and Corporate Governance.

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

AckertDeaves Chapters 3

Investments, 12th Edition, By Zvi Bodie and Alex Kane and Alan Marcus Chapter 11

Corporate Finance, 5th edition, Pearson. By Jonathan Berk and Peter DeMarzo Chapter 29

- **Part ONE: Prospect Theory**

1*. Differentiate the following terms/concepts:

a. Lottery and insurance

b. Segregation and integration

c. Risk aversion and loss aversion

d. Weighting function and event probability

2*. Give an example of a decision where loss aversion could lead an investor to make an irrational choice. How could this situation be mitigated?

3*. Consider an individual who is risk averse. How might this person behave differently in investment scenarios compared to a risk-seeking individual?

4. In your own words, explain how loss aversion and risk aversion might influence a company's financial decision-making.

5. Can a person be both risk-averse and loss-averse? Give a practical example of how these two characteristics might interact.

6*. How might an understanding of loss aversion and risk aversion influence the strategies of a financial advisor when advising clients?

7*. According to prospect theory, which is preferred?

a. Prospect A or B?

Decision (i). Choose between:

A(0.80, $50, $0)and B(0.40, $100, $0)

b. Prospect C or D?

Decision (ii). Choose between:

C(0.00002, $500,000, $0) and D(0.00001, $1,000,000, $0)

c. Are these choices consistent with expected utility theory? Why or why not?

8*. Consider a person with the following value function under prospect theory:

$$v(w) = w^{.5} \quad \text{when } w > 0$$
$$= -2(-w)^{.5} \quad \text{when } w < 0$$

a. Is this individual loss-averse? Explain.

This person is loss averse. Losses are felt twice as much as gains of equal magnitude.

b. Assume that this individual weights values by probabilities, instead of using a prospect theory weighting function. Which of the following prospects would be preferred?

P1(.8, 1000, -800)
P2(.7, 1200, -600)
P3(.5, 2000, -1000)

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9*. Now consider a person with the following value function under prospect theory:

$$v(z) = z^{.8} \quad \text{when } z \geq 0$$
$$= -3(-z)^{.8} \quad \text{when } z < 0$$

This individual has the following weighting function:

$$\pi(pi) = \frac{pi^{\gamma}}{(pi^{\gamma} + (1 - pi)^{\gamma})^{\frac{1}{\gamma}}}$$

where we set γ=.65.

a. Which of the following prospects would he choose?

PA (0.001, -5000)
PB (-5)

b. Repeat the calculation but using probabilities instead of weights.
What does this illustrate?

10*. Why might some prefer a *prix fixe* (fixed price) dinner costing about the same as an *a la carte* one (where you pay individually for each item)? (Assume the food is identical.)

- **Part Two: Agency Theory and Corporate Governance**

11*. Corporate managers work for the owners of the corporation. Consequently, they should make decisions that are in the interests of the owners, rather than their own. What strategies are available to shareholders to help ensure that managers are motivated to act this way?

12*. What inherent characteristic of corporations creates the need for a system of checks on manager behaviour?

13*. What is the role of the board of directors in corporate governance?

14. What role do securities analysts play in monitoring?

15. How are lenders part of corporate governance?

16*. Is it necessarily true that increasing managerial ownership stakes will improve firm performance?

17*. What are a board's options when confronted with dissident shareholders?

18. What is the essential trade-off faced by government in designing regulation of public firms?