

Chapter 17 Q and A with Answers

(1) A company has a 401(k) savings plan for its employees. According to behavioral economics, the participation rate will be about the same whether people are given an easy enrollment form to fill out or are enrolled automatically but given an easy opt-out form to complete if they don't want to participate.

- (a) True
- (b) False**
- (c) We cannot be sure

(2) Two people are playing an ultimatum game with \$100. Player 1 can make an offer to Player 2, who can either accept or reject it. If Player 2 accepts, then they split the money according to Player 1's offer. If Player 2 rejects, neither of them get any money. Player 1 offers \$2 to Player 2. What does *traditional economic theory* say Player 2 will do?

- (a) Accept, because \$2 is better than nothing.**
- (b) Not accept, because \$2 is not worth bothering with.
- (c) Not accept, because the distribution (\$98 for player 1 and \$2 for player 2) is unfair.

(4) A flipped coin lands on heads five times in row. Jaime believes the sixth flip will almost certainly land tails. Jaime is showing an example of: _____.

- (a) bad decision-making
- (b) imperfect information
- (c) the hot hand fallacy
- (d) the gambler's fallacy**

(5) What is an explanation for bounded rationality (also called limited reasoning)?

- (a) People like to take risks.
- (b) People often have incomplete information and limited decision-making time.**
- (c) People really are not concerned with utility maximization.
- (d) People don't know their own preferences.

(6) Loss-aversion tends to cause people to:

- (a) ignore wins completely and only focus on the negative effects of losses.
- (b) behave too conservatively and not take enough risks.**
- (c) gamble only when they can afford to play.
- (d) live boring lives.

(7) The ultimatum game shows that people care about:

- (a) fairness of payoffs.
- (b) uncertainty of payoffs.
- (c) long run payoffs.
- (d) certainty of payoffs.

(8) What is true about risks, risk-taking, and risk preference?

- (a) Risk preferences vary among different people
- (b) Risk-averse people will never engage in an activity with an uncertain outcome
- (c) All activities involve probability and risk
- (d) People never change their risk preferences

(9) Repeated attempts by the US Treasury Department to introduce a \$1 coin have met with strong public resistance. The public simply won't carry the \$1 coin around even though it would save the government billions of dollars (since \$1 coins last much longer than \$1 bills). What concept from behavioral economics helps to explain this?

- (a) The priming effect.
- (b) The status quo bias.
- (c) Risk aversion.
- (d) Inter-temporal decision making.

(10) The following question, "Would you rather have a 20% chance of mortality or an 80% chance of survival?" is an example of _____.

- (a) framing
- (b) priming
- (c) status quo bias
- (d) a preference reversal

(11) The Allais paradox is famous because it shows _____.

- (a) risk aversion
- (b) risk taking
- (c) risk neutrality
- (d) preference reversals

(12) When the Cookie Monster tries to resist eating a cookie this is about _____.

- (a) risk aversion
- (b) risk taking
- (c) intertemporal decision making
- (d) a preference reversal

(13) Behavioral Economics explains

- (a) why people are always rational
- (b) why people are always irrational
- (c) why people are predictably irrational

(14) When contestants are offered the opportunity to switch their choice on Let's Make a Deal, but choose not to switch this can be explained by

- (a) Misperceptions of probability
- (b) Framing
- (c) Intertemporal decision making
- (d) Risk aversion

(15) You take a multiple choice exam and notice that you have not answered A for the first 20 questions, so you decide it is long overdue and answer A on #21, you are exhibiting

- (a) a preference reversal
- (b) the Allais Paradox
- (c) the gambler's fallacy
- (d) the hot hand fallacy

(16) Below are a series of decisions. Match each decision with the appropriate fallacy.

#	Items	Gambler's or Hot Hand?
1	refusing to select lotto numbers that were in the last winning drawing	G
2	rushing to buy a stock merely because its price is falling	G
3	rushing to buy a stock merely because it is doing well	HH
4	An executive taking business risks they normally would not have after winning an award for having the highest returns.	HH

Answer: What fallacy consists of the belief that recent outcomes are unlikely to be repeated, and which one indicates that outcomes that have not occurred recently are due to happen soon?

The gambler's fallacy is the belief that recent outcomes are unlikely to be repeated and that outcomes that have not occurred recently are due to happen soon, whereas the hot hand fallacy is the belief that random sequences exhibit a positive correlation though no relationship exists. Rushing to buy a stock merely because its price is falling suggests that the investor believes that the price will rise soon. Rushing to buy a stock merely because it is doing well demonstrates herd mentality that suggests it will continue to do well. Both of these are examples of fallacious thinking since these decisions were not made solely because of an understanding of the underlying metrics related to profitability, market share, and return on investment.

Research has found that executives who won prestigious awards, such as “CEO of the Year,” tended to underperform their non-celebrity peers in the years just after the prestigious award was bestowed. One likely reason is that these award-winning CEOs think they have a hot hand and, as a result, take risks they should not take.

(17) Classify the individuals described below as risk averse, risk neutral, or risk taking.

a. Joaquin is offered the choice between either taking \$150 or flipping a coin. If the coin comes up heads, Joaquin gets \$250, but if the coin comes up tails, then Joaquin gets nothing. Joaquin prefers to take his chances with the coin flip, which makes him a _____ individual.

Answer: The expected value of a gamble is found by multiplying the outcomes by their probability of occurring and then adding them up. Here, if Joaquin chooses the gamble, he gets \$250 half of the time (or *with a probability of 0.5*), and \$0 half of the time. Because the expected value of the gamble (\$125) is lower than the value of the sure thing (\$150), the fact that Joaquin tries his luck means he is a *risk-taking* individual.

b. Zoe is offered the choice between either taking \$80 or flipping a coin. If the coin comes up heads, Zoe gets \$200, but if the coin comes up tails, then Zoe gets only \$40. After thinking about it for a minute, Zoe chooses to take the \$80. Zoe is a _____ individual.

Answer: Here, if Zoe chooses the gamble, she gets \$200 half of the time and \$40 half of the time. Because the expected value of the gamble (\$120) is higher than the value of the sure thing (\$80), the fact that Zoe chooses the sure thing means she is *risk averse*.

c. Vlad is offered the choice between either taking \$100 or rolling a six-sided die. If the die shows an even number (2, 4, or 6), then Vlad gets \$200, but if the die comes up odd (1, 3, or 5), then Vlad gets nothing. After considering the possible outcomes, Vlad tells someone else to choose for him because he doesn't care. Vlad is a _____ individual.

Answer: Here, if Vlad rolls the die, then he gets \$200 half of the time and nothing half of the time. Because the expected value of the gamble (\$100) is equal to the value of the sure thing (\$100), the fact that Vlad doesn't care means he is *risk neutral*.

(18) A gamble below has three options:

- i. **\$50 if a 2,3,4,5,6 is drawn**
 -\$20 if a 7,8,9,10,J,Q,K,A is drawn
- ii. **\$40 if a red card is drawn**

-\$10 if a black card is drawn

iii. \$16 sure thing

a. Which option has the highest expected value?

Answer:

The EV of i is $\$50 \cdot (5/13) - \$20(8/13) = \$6.93$

The EV of ii is $\$40 \cdot (.5) - \$10 \cdot (.5) = \$15.00$

The EV of iii is \$16.

Option iii has the highest EV.

b. If you could buy insurance for \$3.50 and it will cover any losses you would experience does this change your answer to question a?

Answer:

The EV of i is $\$50 \cdot (5/13) - \$3.50 = \$15.73$

The EV of ii is $\$40 \cdot (.5) - \$3.50 = \$16.50$

The EV of iii is \$16.

Option ii has the highest EV.