

REVIEW QUESTIONS I

EE 416 semester 2/2021

Review questions here don't exhaust all aspects for each topic we have learned.

Any materials on the lecture slides are a fair game for midterm(and final) exam.

1. [Introduction] What are some assumptions of the standard economic model?
2. [Introduction] What are the three main aspects of how individuals might deviate from the standard models, according to DellaVigna(2009)? Give one example for each aspect.
3. [Public policy to combat error] What is Libertarian Paternalism? What are the characteristics of Nudge?
4. [Public policy to combat error] **Apples or fries?**

US hamburger chains have started serving apple slices instead of French fries with their “meal” options. Fries are still available, but the customer has to ask to have fries substituted for apples. Preliminary reports suggest that as a result, customers end up eating more apples and less fries.

What kind of intervention is this?

Source: Exercise 12.2 in “A Course in Behavioral Economics” by Erik Angner

5. [Public policy to combat error] **The Bloomberg ban**

As part of a 2013 public-health initiative spearheaded by then-mayor Michael Bloomberg, New York City banned the sale of sodas larger than 16 ounces (or about 0.5 liters) in restaurants, movie theaters, and the like. (The law was later struck down by the state’s highest court.)

Explain why the “Bloomberg ban” does not constitute a nudge.

Source: Exercise 12.3 in “A Course in Behavioral Economics” by Erik Angner

6. [Public policy to combat error] **Google**

Google wants to encourage its employees to eat healthily. Fast Company reports: “In pursuit of that healthiness, happiness, and innovation, the software giant has turned to ‘nudges’: simple, subtle cues that prompt people to make better decisions.” Borrowing ideas from behavioral economics, Google is now: (1) putting candy in opaque bins rather than clear dispensers; (2) placing salad in full view to people entering the cafeteria and dessert much further down; (3) encouraging people to use smaller plates by pointing out that people with bigger plates tend to eat more; (4) color-coding foods in accordance with how healthy they are; and more.”

If you were to work at Google and were assigned to assess whether the nudges had been working, how would you design the study to measure the effect of the nudges?

Source: Example 12.4 in “A Course in Behavioral Economics” by Erik Angner

7. [Optimal paternalism] What is the rationale behind imposing sin tax, according to O’Donoghue&Rabin(2006)? How can one find the sin tax rate?

8. [Time preference: exponential discounting]

Susan has the choice between the following two options:

Option 1: exercising at time 1 (utility=0) and being healthy and happy at time 2 (utility=12); and

Option 2: watching television at time 1 (utility=6) and being unhealthy and unhappy at time 2 (utility=0).

Susan discounts the future exponentially. Her $\delta=2/3$. From the point of view of time 0: What is her utility of *option 1*? What is her utility of *option 2*?

9. [Time Preference: present bias]

Consider the following choice problems:

· Problem 1:

A: \$50 *tomorrow*

B: \$70 *in 2 days*

· Problem 2:

C: \$50 *in 10 days*

D: \$70 *in 11 days*

Suppose Tom has β, δ time preference, with $\beta < 1, \delta < 1$.

If we are told that from *today's* perspective, Tom prefers A to B, $A \succ B$, what would we expect for his preferences over options C and D from *today's* perspective? Do we expect difference in preference ordering between problem 1 and problem 2? Explain.

10. [Time Preference: Partial naivete]

Suppose you must complete a task within three days:

If complete on day 1, $u_1 = -3, u_2 = u_3 = 0$.

If complete on day 2, $u_2 = -5, u_1 = u_3 = 0$.

If complete on day 3, $u_3 = -8, u_1 = u_2 = 0$.

This is equivalent to having the immediate cost schedule:

$$c \equiv (3, 5, 8)$$

Consider a partial naivete with $(\beta, \hat{\beta}, \delta)$ preferences. Let $\delta = 1, \beta = \frac{1}{2}, \hat{\beta} = \frac{3}{4}$. That is, she weighs her future payoff in half for her current decision, but she think that she will weigh her payoff at 75% of the actual payoff for her decisions in the future.

(a.) On day 1, what is her belief about day-2 behavior?

(b.) What is her day-1 preferences?

(c.) On day 1, when does she plan to do the task?

(d.) When does she actually complete the task?

(e.) If instead, she is considering to do a task with immediate reward of $v \equiv (3, 5, 8)$. On day 1, when does she plan to do the task? And, when does she actually complete the task?