



AP Microeconomics Webinar

Topic 1.5 - Cost Benefit Analysis

Presented by: Amanda Stiglbauer

Email: econstig@gmail.com

Date: February 26, 2024



Agenda

- *Warm Up*
- *Content Delivery -
Cost-Benefit Analysis*
- *Practice - Student Activity 1.5*
- *Exit Ticket*
- *Wrap Up & Evaluation*



Learning Targets

1. Define the terms total benefit, total cost, marginal benefit, and marginal cost.
2. Explain that some decisions are made based on total benefit and total cost but most economic decision making focuses on a comparison of marginal benefit and marginal cost.
3. Emphasize the difference between marginal concepts and total concepts.



How many total hours will you spend studying for your next AP Micro test? If you studied 30 minutes more, would it make a difference? Why or why not?



Students, write your response!



Pear Deck Interactive Slide
Do not remove this bar

How much will you prepare for your AP Micro test?

- Will you improve your human capital by studying?
- What do you have to give up to study for your test?
- How many of you will do whatever you can to earn an A on your next AP Micro test?
 - Why do you want an A instead of a B? C? D?



Why don't you stop studying when you think you know enough to earn a B or C?

- What do you have to give up to earn the A instead of settling for a B or C?
- Initial decision to study was based on **total benefit** versus **total cost**.
- Once you start studying, your decision to study another 10 minutes was based on the **marginal (additional) cost**.



How do these quotes relate to economics?

“Always take the shortcut; and that is the rational one. Therefore say and do everything according to soundest reason.”

Meditations iv.51 Marcus Aurelius A.D. 120 to 181

“Whatever is worth doing at all is worth doing well.”

Philip Dormer Stanhope Earl of Chesterfield 1694 to 1773

Always buy the best!



We don't always buy the BEST on the market....we settle for products with fewer features because the extra benefits are not worth the extra cost.



“Life is a chess match. Every decision that you make has a consequence to it.”
P.K. Subban Canadian Pro-Hockey Player born 1989



Cost Benefit Analysis

Greatest difference between

Total Benefit - Total Cost

Let's Practice

Hiring one more worker will have a total cost of \$100 a day, but the benefit of hiring that worker will be \$200 a day. Should the firm hire the worker?



Students choose an option

Pear Deck Interactive Slide
Do not remove this bar

Let's Practice Again

Buying a box of Girl Scout cookies gives Daniel a total benefit of \$3 and the box of cookies has a total cost of \$5. Should Daniel buy the cookies?



Students choose an option

Pear Deck Interactive Slide
Do not remove this bar

Cost Benefit using

Marginal Analysis (MB = MC):

Weighing the expected **additional** costs and expected **additional** benefits of making a decision.

- If the marginal (additional) benefit of an action is greater than (or equal to) the marginal (additional) cost, DO IT!
- If the marginal cost of an action is greater than the marginal benefit, DON'T DO IT!

After reading in Bartlett's Familiar Quotations that "knowledge is power," a student decides to be as knowledgeable as possible by devoting the next 20 years, without interruption, to college. From the hypothetical data below, would you advise this person to reconsider a career as a professional student? Answer the questions that follow.



Table 1-6.1

DEGREE EARNED AND EXPECTED LIFETIME EARNINGS AND COSTS

Highest degree earned	Expected lifetime earnings (total benefit) by degree	Marginal benefit of additional degree	Expected lifetime costs (total cost) by degree	Marginal cost of additional degree
High school	\$600,000	+\$600,000	\$0	+\$0
Associate	\$1,200,000		\$200,000	
Bachelor's	\$1,700,000		\$500,000	+\$300,000
Master's	\$2,100,000	+\$400,000	\$900,000	
Doctorate	\$2,400,000		\$1,400,000	



Table 1-6.1

DEGREE EARNED AND EXPECTED LIFETIME EARNINGS AND COSTS

Highest degree earned	Expected lifetime earnings (total benefit) by degree	Marginal benefit of additional degree	Expected lifetime costs (total cost) by degree	Marginal cost of additional degree
High school	\$600,000	+\$600,000	\$0	+\$0
Associate	\$1,200,000	+\$600,000	\$200,000	+\$200,000
Bachelor's	\$1,700,000	+\$500,000	\$500,000	+\$300,000
Master's	\$2,100,000	+\$400,000	\$900,000	+\$400,000
Doctorate	\$2,400,000	+\$300,000	\$1,400,000	+\$500,000

Do you get it?

1. Would a master's degree and a doctorate degree increase the human capital of the student?
2. Assuming that inflation and interest rates have been taken into account in these data, what is the optimal degree for this person to earn?
3. Is the monetary cost the only factor that should be taken into consideration when deciding whether to pursue an advanced degree?
4. Which criterion did you use to determine the optimal degree this person should obtain? (TB = TC or MB = MC)

You are at an “all you care to eat for one price” pizza buffet and you decide to have another piece of pizza. Which criteria did you use to determine your choice?



Exit Ticket

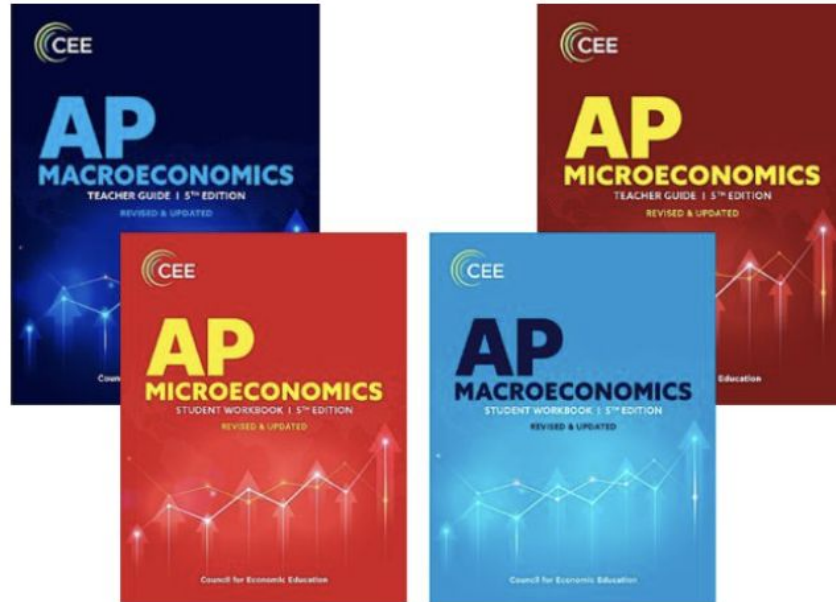
Does marginal analysis mean that you should do all you can to complete an assignment or an activity to the best of your ability, regardless of the cost? Explain!



Students, write your response!

Pear Deck Interactive Slide
Do not remove this bar

Content Delivered Thanks to....





AP Microeconomics Webinar

Topic 1.5 - Cost Benefit Analysis

Presented by: Amanda Stiglbauer

Email: econstig@gmail.com

Date: February 26, 2024

