



Lesson 5:

Is Efficiency Ethical?

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In this economics lesson, students role-play to understand both the power and limits of economic analysis, focusing on the “how” of economic and ethical reasoning.

Description of the lesson

First, students play the role of a doctor who is trying to choose who gets scarce medicine and having to make decisions about efficiency. Students will learn how both positive and normative statements can be used to make decisions. Next, they analyze the effects a casino could have on jobs and other outcomes for a city. Lastly, they analyze the effects of ethical considerations on their own purchasing decisions. The lesson helps students understand both the power and the limits of economic analysis.

Economics

In a world of scarcity, eliminating waste creates new possibilities — for saving more lives, feeding more families, and overcoming real material limitations. Therefore economists are justly concerned with efficiency. However, deciding what is efficient requires decision-makers to identify society's goals and priorities. Whether they realize it or not, economists operate within an ethical framework when they evaluate economic efficiency. While other lessons in the *Ethics, Economics, and Social Issues* curriculum focus on the *what* of ethics (choosing between outcome-based, duty-based, and virtue-based ethics), this lesson focuses on the *how* of economic and ethical reasoning.

Ethics

Efficiency is when a choice brings you the most possible good along with the least possible bad. That must be ethically desirable, right? But the question becomes complicated when people cannot agree on what is good or bad, or how much importance to attach to different ethical considerations. This lesson illustrates the complications with defining certain choices as ethical or not, and includes tools that students can use to include ethical considerations into their economic way of thinking.

Objectives:

After completing this lesson students will be able to:

- describe how efficiency and ethics relate.
- explain how conflicting ethical visions can make economic analysis difficult.
- integrate ethical thinking into marginal analysis.

Standards

[Voluntary National Content Standards in Economics](#)¹

- Standard 2: Decision Making
 - Effective decision making requires comparing the additional costs of alternatives with the additional benefits. Many choices involve doing a little more or a little less of something: few choices are “all or nothing” decisions.
- Standard 3: Allocation
 - Different methods can be used to allocate goods and services. People acting individually or collectively must choose which methods to use to allocate different kinds of goods and services.

Concepts

Decision-making/Cost-benefit analysis, Marginal Analysis, Opportunity cost, Allocative Efficiency

Time Required

60 Minutes

Materials Needed

- Slide presentation: Is Efficiency Ethical?
- Copies of Activity 5.1: Solving a Public Health Problem, one per student
- Copies of Activity 5.2: Should the City Allow a Casino?, one per student
- Copies of Activity 5.3: The Town Hall Meeting, one per student
- Copies of Assessment 5: How Do Ethics Affect Your Personal Decisions?, one per student
- Copies or link to reading: “Richmond Votes Against Building ONE Casino + Resort.”
<https://www.whsv.com/2021/11/03/richmond-votes-against-building-one-casino-resort/>, one per student, if students need more background information before completing Activity 5.3
- Pen or pencil, one per student

¹ Voluntary National Content Standards in Economics: <https://www.councilforeconed.org/wp-content/uploads/2012/03/voluntary-national-content-standards-2010.pdf>

Procedure

1. Tell the class that the purpose of this lesson is to learn how economists often describe people's choices in terms of efficiency, and to investigate how and if we can think ethically about the concept of efficiency.
2. Slide 2 – Ask students “What does efficiency mean to you?” Discuss examples from the slide – What is the most efficient way to study for a test? What is the most efficient way to get from your home to school? Tell the students that in economics **efficiency** means getting the most of some goal at the least (opportunity) cost. It is an analysis of the world compared to some desired "optimal" state. **Opportunity cost** is the next best option foregone when someone makes a choice, the next-best alternative a person gives up in making a choice..
3. Slide 3 – Continues the definition of efficiency and adds the concept of allocation.
4. Slide 4 - Economists must always define efficiency in relation to the goals of society. For example, a doctor in a hospital has to make life-and-death decisions. We can measure the doctor's efficiency in several different ways — for example, by the number of people the doctor has healed.
5. Slide 5 introduces Activity 5:1. Divide the students into small groups of 3-4 students, and give each student a copy of Activity 5.1: Solving a Public Health Problem. Display slide 5, which also has instructions for the activity. Explain that they are going to be a doctor who runs a hospital in an isolated rural area. You have 20 sick patients: 10 patients have Disease A and 10 patients have Disease B. Both diseases are painful and make the people unable to do daily tasks. Each patient with Disease A needs one dose of medicine to be cured. Each patient with Disease B needs two doses of medicine to be cured. This activity requires students to take the role of a doctor who has to decide to whom scarce medicine is to be given. The activity requires the difficult choice of whether to heal the most people, or to heal the youngest people.
6. Have students work in their group for 5-10 minutes to answer the questions on Activity 5.1 Solving a Public Health Problem. Then discuss the answers with the class using Slide 6 and the Activity 5.1: Solving a Public Health Problem Answer Key.
7. Tell the class that as part of the activity, they evaluated the efficiency of different **allocations** of health care. Allocation is the decision about what should be produced, how it should be produced, and who will consume it. It is the process of distributing something.
8. Slide 7 Tell students that economists must analyze public policy proposals and even provide recommendations. Part of that is collecting facts (**positive statements**) and weigh the importance of different goals (**normative statements**). For example, in the activity you could save 10 Disease A patients with the doses you had—that is a fact and a positive statement. But whether you should save the 10 patients with Disease A (a normative statement) depends upon the goal of society.

9. Slide 8 - Next, explain that society has many possible goals including preserving freedom, maintaining national security, improving standards of living, equality, and providing opportunities for all citizens. In addition, economists often focus specifically on the goal of enhancing “welfare.”
10. Slide 9 - Also define for students that **allocative efficiency** means that people are able to satisfy their individual preferences, given their income constraints, while not making anyone else worse off. To help the students understand the importance of this concept, ask if a dictator were to require everyone to buy only classical music, would this satisfy individual preferences? *Answers may vary but include: this would not make everyone better off, since it would not satisfy many - or most - people’s individual preferences. Not everyone likes classical music!*
11. Tell students that the previous activity showed two principles to test if an efficient choice is indeed ethical: first, the goal must be ethical. That is, we must consider both the ends (outcome-based ethics) and the means (duty-based ethics) of our choices to determine if the action is right or wrong. This implies that when making a choice, we ought to define an ethical goal, and then consider the costs and benefits.
12. Define the following for students which is also in slide 11.
 - a. **Outcomes-based ethics:** a moral philosophy that discerns right or wrong action based on the consequences produced by the action.
 - b. **Duty-based ethics:** a moral philosophy that discerns right or wrong based on the analysis of one’s obligations.
13. Tell students that in our lesson an example of outcome-based ethics is to consider saving the most amount of people. But we must also consider alternatives or what we gave up by saving those people. To do this we must think about duty-based ethics and consider the lives saved and whether that met our obligations or duty.
14. Tell the students that any discussion about what improves the welfare of society will be controversial because people don’t necessarily agree on the most important goals of society. Economists themselves have had diverging viewpoints historically. As a result, the way economists define welfare and efficiency has changed over time.
15. The next part of the lesson asks students to attempt to make an efficient public choice, but one in which clashing ethical beliefs complicate things. Distribute **Activity 5.2: Should the City Allow a Casino?** to each student. This activity should take about 15 minutes to complete, either individually, in groups of 3-4, or as a class guided discussion.
16. Read or have students read the scenario out loud (also shown on Slide 12): “You are an economist who works for your city government. The city is thinking about allowing a casino to be built in order to create jobs. You will begin this activity considering all the ways that a casino moving into town could create jobs. Your task in this part is to list all the possible ways a casino could create jobs.” After students have completed the first part of the activity, ask students to share some of their answers out loud. Next, ask the following question from the activity: “What else besides

jobs created would determine if this is allocatively efficient?" *Answers may vary but include: No. So far the class's analysis has not considered the criteria from slide 9 - 10, that is, whether the goal of creating jobs is ethical, and what the costs and benefits to building a casino are.*

17. Slide 13 - Read the scenario out loud: "You are the same economist as in the previous scenario. You gave your report on casino jobs to the city government, but you feel that something is missing. You think that the city's goal of making jobs fails to consider other important goals. You decide to hold a town hall meeting to learn about the ethical views of the citizens as they think about the casino."
18. Slide 14 - Read the four different citizens' opinions, and then use the opinions to introduce marginal decision.
19. Explain and define the following concepts for students and show the definitions on slide 15 and review with slide 16:
 - a. **Marginal analysis** is studying the production or consumption of each additional unit of something that brings value (or "utility").
 - b. **Marginal benefit** is the added value from each additional unit of something that one chooses, while **marginal cost** is the decreased value from each additional unit of something one chooses.
 - c. **Market equilibrium** is where the marginal benefit (demand curve) equals the marginal cost (supply curve). At this point there is no shortage or surplus.
20. **Distribute Activity 5.3 The Town Hall Meeting.**
21. Explain that each opinion provides an example that suggests the casino will help or hurt the community in some way. Your job is to weigh these citizens' concerns to help you ultimately decide if the marginal benefit of the casino will outweigh the marginal cost of the casino. Teacher note: some of the opinions might be more clear than others about whether it is a cost or benefit. This is ok and expected as students may make different interpretations of the statement or add more background to justify their point.
22. The citizen's brief opinions should be enough for students to get the point. But if students need more background on the pros and cons of a casino in order to complete the assignment, they can use this news report. This will add an additional 5-10 minutes of reading time. "[Richmond Votes Against Building One Casino Resort.](#)" ²
23. Slide 17 - Review a few student answers to this activity with the whole class before proceeding. Use Activity 5.3: The Town Hall Meeting Suggested Answers to guide your discussion.

² "Richmond votes against building one casino resort" <https://www.whsv.com/2021/11/03/richmond-votes-against-building-one-casino-resort/>

Closure

24. Slide 18 - Remind the students that if we use the word 'efficient' in a broad way, then it must be an ethical concept, because 'efficient' can simply mean making people better off without making anyone worse off. But we've also learned that we need to define what we mean by being 'better off' in any given situation and for whatever goals we may have. Achieving efficiency for one goal may be in tension with other goals. By understanding the judgments required to define welfare and efficiency, economists can better understand real world public-policy problems. And students can be more thoughtful when making personal decisions. Now that we know how to use ethical reasoning along with economics reasoning – by including ethics in our marginal analysis - we will need to think more about how we decide what is ethical: whether our decisions about right and wrong are based on ideas about outcomes, or duty, or something else."

Assessment

25. In the last step of this lesson, students learn how they actually can use ethical considerations to make efficient personal choices. Say "when an individual is making a personal choice, we can go back to seeking efficiency by maximizing our personal preferences. We just need to make sure that our preferences are guided by what we think is right and wrong, and that we aren't giving up other important ethical goals!" Show slide 19, entitled "Assessment 5: How Do Ethics Affect Your Personal Decisions?"
26. Organize students into groups of 2-4 for a short brainstorming activity about the ways they include their ethical values in their personal decision-making. This will prepare them to do their assessment. In their groups, have them brainstorm ways they consider ethics when they shop. The group does not have to have a consensus or agree on these things. Tell the students that vegetarian students would consider eating meat unethical, so they would not buy meat. Students might consider shopping at a store owned by a friend to be ethical, so they would be more likely to shop there. Encourage groups - perhaps by means of friendly competition - to come up with the longest list in the class.
27. Give each student a copy of Assessment 5: How Do Ethics Affect Your Personal Decisions? Tell the students to do the first part of the assessment activity individually, as it is explained on Slide 19: "make a list of at least five ethical beliefs that you may consider when shopping. "The purpose of the assessment is to emphasize that—in contrast to the public policy question from the previous activity—efficiency and ethics can indeed go together if we are making personal choices. This also leads students back into their standard economics learning of marginal analysis.
28. We can analyze personal preferences with marginal analysis. There might be an event or ethical belief that would change how much benefit or utility you would receive. If your ethical beliefs would make you more likely to buy the item then you would shift the marginal benefit curve to the right or shift it to the left if your ethical beliefs would make you buy less of it. Students can then complete the rest of the assessment worksheet, either in class or at home.

Sample assessment items:

1. What welfare goal is allocative efficiency based on?
 - a. **The satisfaction of individual preferences**
 - b. The greatest happiness for the poorest members of society
 - c. Saving the most lives
 - d. Being fair to all citizens
2. Ariya received a birthday gift of an expensive pink sweater. She hates pink and would prefer to return the sweater to the store and use the money for dinner and a movie. From Ariya's perspective, the current allocation of goods is
 - a. efficient because people should treasure the gifts they receive.
 - b. efficient because Ariya hasn't yet returned the sweater.
 - c. inefficient because the gift was from a family member.
 - d. **inefficient because it doesn't satisfy Ariya's preferences**
3. An economic policy could create economic efficiency but might not be equitable. To resolve this problem requires
 - a. economists and philosophers to work together
 - b. **considering ethical goals**
 - c. marginal analysis
 - d. market equilibrium

Essay Questions

1. What do economists mean by welfare and allocative efficiency? How do economists apply these concepts to public policy analysis? What problems exist with the use of these concepts?
Answers may vary but include: economists define welfare as "the satisfaction of individual preferences." Allocative efficiency means the economy is producing the right mix of goods and services, and no voluntary trade is possible that would make one person better and leave no one else worse off. The economic definition of efficiency may conflict with other definitions of efficiency such as saving the most lives. Other values besides welfare and efficiency arise in public-policy deliberations: fairness, freedom and public safety, for example.
2. There are 10 people and space for only five in a life raft. How would you decide which people get a place on the raft? What solution to this problem would economists consider allocatively efficient? What other values besides efficiency are important in analyzing this situation?
Answers may vary but include: All definitions of welfare and efficiency involve ethical judgments about what is most important. Allocative efficiency means allowing people to make choices that satisfy their preferences. Hence, the highest bidders could satisfy their preferences by bidding for a spot on the life raft. This could be considered fair if the income distribution in society is considered fair. However, the efficient approach comes into conflict with other social values, which include fairness, basic equality of all and human dignity. In deciding public policy issues, society considers not only efficiency but also a host of other values.

Extension

In Activity 5.2 and 5.3, students learn that failing to consider unintended consequences can lead to bad ethical outcomes. Students can use cost-benefit analysis to list all the benefits and risks they can think of when pursuing allocative efficiency. With this mode of analysis, ethical considerations act as a constraint on allocative efficiency. Students can learn how to do cost-benefit analysis using this website:

<https://vcee.org/economic-decision-making-ms-and-hs/>

Public schools in the United States get most of their money from the state and local government. This means that schools in wealthier districts tend to get more funding, but it also gives localities more control over their education. Use the Ethical Decision-Making Model to evaluate whether school funding ought to be done more at the local, state, or national level. Lesson 11³ in the Ethics, Economics, and Social Issues curriculum contains activities on this topic. (Lesson 11 is coming soon!)

Teachers can use this lesson to steer their students back into learning about marginal analysis. Use the following lesson plans: [Anything Worth Doing is Not Necessarily Worth Doing Well](#) and [Deriving Marginalism](#) from Econedlink.org, and [Marginal Analysis: How Clean is Clean Enough](#) from the Federal Reserve Bank of St. Louis.

References

EconEdLink.org (2020). Marginal Analysis. <https://www.econedlink.org/resources/marginal-analysis/>

EconEdLink.org (n.d.) PACED Decision-making Grid. https://www.econedlink.org/wp-content/uploads/2021/01/463_PACED1.pdf

³ Link to Matt Pierson's lesson on school funding

Activity 5.1: Solving a Public Health Problem

You are a doctor who runs a hospital in an isolated rural area. You have 20 sick patients: 10 patients have Disease A and 10 patients have Disease B. Both diseases are painful and make the people unable to do daily tasks.

- Each patient with **Disease A** needs **one dose** of medicine to be cured.
- Each patient with **Disease B** needs **two doses** of medicine to be cured.

Problem: You have only 10 doses of medicine for the rest of the year. Whom will you pick to get the medicine?

Questions

1. How many people could you cure if you gave all the medicine to patients with Disease A?
2. How many people could you cure if you gave all the medicine to patients with Disease B?
3. Which option is the most efficient at healing people?
4. What if you learn that patients with Disease A are all more than 80 years old, and patients with Disease B are all children. Would this change how you choose to allocate your medicine, and if so, why?
5. If you had to personally decide how to allocate this medicine, what other factors (besides number of people helped and age) would you consider?

Activity 5.1: Solving a Public Health Problem - Answer Key

You are a doctor who runs a hospital in an isolated rural area. You have 20 sick patients: 10 patients have Disease A and 10 patients have Disease B. Both diseases are painful and make the people unable to function fully day-to-day.

- Each patient with Disease A needs one dose of medicine to be cured.
- Each patient with Disease B needs two doses of medicine to be cured.

Problem: You have only 10 doses of medicine for the rest of the year. Whoever isn't cured effectively loses a year of their life.

Questions

1. How many people could you heal if you gave all the medicine to patients with Disease A? *Answers may vary but include: you have 10 doses of medicine, and each patient with Disease A can be cured with one dose. Therefore, you could heal 10 people if you gave all the medicine to Disease A patients.*
2. How many people could you heal if you gave all the medicine to patients with Disease B? *Answers may vary but include: Each Disease B patient requires two doses of medicine to be cured. Therefore, with only 10 doses of medicine, you could, at most, heal five people. You wouldn't heal any people if you divided the medicine equally among the Disease B patients, since each patient would get only one dose and each would suffer.*
3. Which option is the most efficient at healing people? *Answers may vary but include: Giving the medicine to Disease A patients would heal twice as many people as giving it to Disease B patients. Allocating medicine to Disease A patients is the most efficient option.*
4. What if you learn that patients with Disease A are all more than 80 years old, and patients with Disease B are all children. Would this change how you choose to allocate your medicine, and if so, why? *Answers may vary, but many students would now be inclined to heal as many children as possible.*
5. If you had to personally decide how to allocate this medicine, what other factors (besides number of people helped and age) would you consider? *Answers may vary but include: May consider if one of the adults is a child's caretaker, or if an adult has a really important job that no one else can do, or consider if someone has already had a very difficult life. Other students might be concerned with the children and their age, if they have siblings, etc.*

Activity 5.3: The Town Hall Meeting

Scenario #2. You are the same economist as in the previous scenario. You gave your report on casino jobs to the city government, but you feel that something is missing. You think that the city’s goal of making jobs fails to consider other important goals. You decide to hold a town hall meeting to learn about the ethical views of the citizens as they think about the casino. Below are some brief points citizens made during the town hall. **Place an X if you feel this citizen’s point adds to the cost of the casino or the benefit of the casino.**

Citizen opinion	Adds to the cost of the casino	Adds to the benefit of a casino
Citizen 1: A casino would bring jobs to the community.		
Citizen 2: A casino would cause gambling addiction for many of our citizens.		
Citizen 3: Casinos make money on poor and lower-middle-class people. Our city should support projects that lead to wealth equality, not the casino’s false promises of getting rich.		
Citizen 4: Gambling is fun. Why are we even voting on this? No one can tell me what I should do with my money!		
Citizen 5: A casino would bring additional tax money for the city that could be used for parks, schools, or other projects.		
Citizen 6: Casinos bring more crime. Gambling is no way to build a virtuous citizenry.		
Citizen 7: Most people in the community will not even use the casino.		
Citizen 8: The casino would take business from the downtown restaurants and bars.		

1. Which of the citizens’ concerns or opinions are the most valuable to you? Why?
2. What did you decide—should we allow the casino? Is $MB > MC$ or $MC > MB$?
3. Will all the citizens agree that your choice is the “efficient” choice? Why or why not?

Answer Key - Activity 5.2: Should the City Allow a Casino?

Scenario #1: You are an economist who works for your city government. The city is thinking about allowing a casino to be built in order to create jobs.

Your task: List as many ways that a casino could create jobs as you can think (be appropriate).

Jobs created
<i>Answers may vary but may include:</i> <i>Police officers</i> <i>Restaurant owners</i> <i>Wait staff</i> <i>Janitors</i> <i>Croupiers (card dealer)</i> <i>Gambling addiction counselors</i> <i>Security guards</i> <i>Cashiers</i> <i>Maintenance staff to fix the slot machines</i>

Based only on your analysis of jobs created, is the casino allocatively efficient for the goal of creating jobs? Yes _____ No _____

What else besides jobs created would determine if this is allocatively efficient?

Answers may vary but include: *So far the class's analysis has not considered the criteria from the slides 9 and 10, that is, whether the goal of creating jobs is ethical, what the alternatives to building a casino are, and has anyone been made worse off.*

Answer Key - Activity 5.3: Town Hall Meeting

Scenario #2. You are the same economist as in the previous scenario. You gave your report on casino jobs to the city government, but you feel that something is missing. You think that the city's goal of making jobs fails to consider other important goals. You decide to hold a town hall meeting to learn about the ethical views of the citizens as they think about the casino. Below are some brief points citizens made during the town hall. Place an X if you feel this citizen's point adds to the cost of the casino or the benefit of the casino.

Teacher Note: below the x's are a suggestion and as long as a student can justify the column accept either answer

Citizen opinion	Adds to the cost of the casino	Adds to the benefit of a casino
Citizen 1: A casino would bring jobs to the community.		x
Citizen 2: A casino would cause gambling addiction for many of our citizens.	x	
Citizen 3: Casinos make money on poor and lower-middle-class people. Our city should support projects that lead to wealth equality, not the casino's false promises of getting rich.	x	
Citizen 4: Gambling is fun. Why are we even voting on this? No one can tell me what I should do with my money!		x
Citizen 5: A casino would bring additional tax money for the city that could be used for parks, schools, or other projects.		x
Citizen 6: Casinos bring more crime. Gambling is no way to build a virtuous citizenry.	x	
Citizen 7: Most people in the community will not even use the casino.	x	x
Citizen 8: The casino would take business from the downtown restaurants and bars.	x	

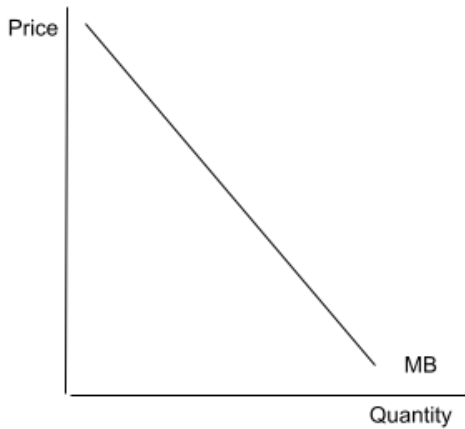
1. Which of the citizens' concerns or opinions are the most valuable to you? Why?
Answers will vary but a student might have a strong opinion on one or two of the statements based on personal experience or something they read/heard from parents or the news.
2. What did you decide—should we allow the casino? Is $MB > MC$ or $MC > MB$?
Student answers will vary which is good. They should use the x's in the above activity and their answer to Q#1 as a guide. Teacher should make sure these align to justify $MB > MC$ or vice versa.
3. Will all the citizens agree that your choice is the “efficient” choice? Why or why not?
Answers will vary but include: No, people have different preferences or they have different values that will weigh into their choices.

Assessment 5: How Do Ethics Affect Your Personal Decisions?

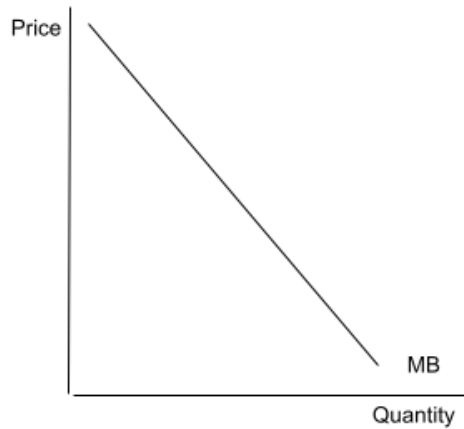
When you are making a personal choice, your ethical beliefs affect your decisions.

1. Make a list of at least five ethical beliefs that you may consider when shopping.
2. We can analyze personal preferences with marginal analysis. Read each ethical consideration below. Then shift each marginal benefit curve below to the **right** if your ethical beliefs would make you **buy more** of that thing, or shift it to the **left** if your ethical beliefs would make you **buy less** of it. If neither, explain why in a few words.

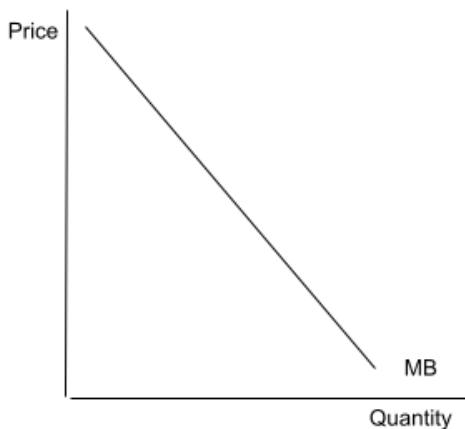
a. Product was made in this country



b. Product is environmentally friendly



c. Company takes a stance on current social issues



d. You do not know if the company pays their employees well



3. Are ethical beliefs part of efficient choice-making? Why or why not?

Assessment 5: How Do Ethics Affect Your Personal Decisions?

Suggested Answers

When you are making a personal choice, your ethical beliefs can affect your decisions.

1. Make a list of at least five ethical beliefs that you may consider when shopping.

Answers may vary, but may include the following examples:

- a) *If workers at the store are paid well*
 - b) *If it is a store in my neighborhood*
 - c) *If I know the owners*
 - d) *If food sold at the store is healthy*
 - e) *If I think that more stores like this should exist, and I just want to support them*
2. We can analyze personal preferences with marginal analysis. Read each ethical consideration below. Then shift each marginal benefit curve below to the **right** if your ethical beliefs would make you **buy more** of that thing, or shift it to the **left** if your ethical beliefs would make you **buy less** of it. If neither, explain why in a few words. *Answers may vary. Below are some possible valid examples of student answers.*

- a. Product was made in this country

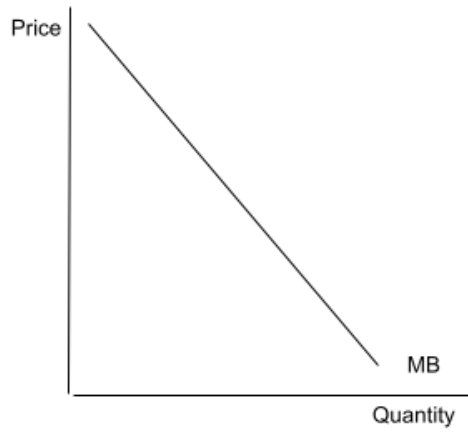


- b. Product is environmentally friendly



c. Company takes a stance on current social issues

Focus on the Product



d. You do not know if the company pays their employees well



3. Are ethical beliefs part of efficient choice-making? Why or why not? **Answers may vary but may include:**
Yes. A choice is successful if it fulfills my goals, including ethical goals.