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Applied Economics

SENIOR
HIGH
SCHOOL

Impact of Business on the Community:
Externalities

Self-Learning
Module

15

Quarter 4



ACCOUNTANCY, BUSINESS AND MANAGEMENT



Applied Economics

Quarter 4 – Self-Learning Module 15: Impact of Business on the Community:

Externalities

First Edition, 2020

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Applied Economics

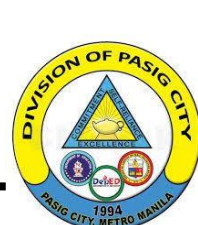
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Impact of Business on the Community:
Externalities



Introductory Message

For the facilitator:

Welcome to the Senior High School – Applied Economics Self Learning Module on Impact of Business on the Community: Externalities!

This Self-Learning Module was collaboratively designed, developed and reviewed by educators from the Schools Division Office of Pasig City headed by its Officer-in-Charge Schools Division Superintendent, Ma. Evalou Concepcion A. Agustin, in partnership with the City Government of Pasig through its mayor, Honorable Victor Ma. Regis N. Sotto. The writers utilized the standards set by the K to 12 Curriculum using the Most Essential Learning Competencies (MELC) in developing this instructional resource.

This learning material hopes to engage the learners in guided and independent learning activities at their own pace and time. Further, this also aims to help learners acquire the needed 21st century skills especially the 5 Cs, namely: Communication, Collaboration, Creativity, Critical Thinking, and Character while taking into consideration their needs and circumstances.

In addition to the material in the main text, you will also see this box in the body of the module:



Notes to the Teacher

This contains helpful tips or strategies that will help you in guiding the learners.

As a facilitator you are expected to orient the learners on how to use this module. You also need to keep track of the learners' progress while allowing them to manage their own learning. Moreover, you are expected to encourage and assist the learners as they do the tasks included in the module.

For the learner:

Welcome to the Applied Economics Self Learning Module on Impact of Business on the Community: Externalities!

This module was designed to provide you with fun and meaningful opportunities for guided and independent learning at your own pace and time. You will be enabled to process the contents of the learning material while being an active learner.

This module has the following parts and corresponding icons:



Expectations - This points to the set of knowledge and skills that you will learn after completing the module.



Pretest - This measures your prior knowledge about the lesson at hand.



Recap - This part of the module provides a review of concepts and skills that you already know about a previous lesson.



Lesson - This section discusses the topic in the module.



Activities - This is a set of activities that you need to perform.



Wrap-Up - This section summarizes the concepts and application of the lesson.



Valuing - This part integrates a desirable moral value in the lesson.



Posttest - This measures how much you have learned from the entire module.



EXPECTATIONS

After going through this module, you are expected to:

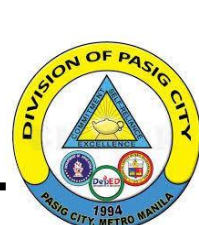
1. define positive and negative externality;
2. evaluate the impact of the externalities on the society; and
3. formulate a policy to tamper the negative externality.



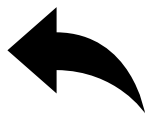
PRETEST

Directions: Choose the letter of the best answer and write it on a separate sheet of paper.

1. This occurs when producing or consuming a good cause an impact on third parties not directly related to the transaction.
 - A. Consumption Failure
 - B. Production Failure
 - C. Business Externality
 - D. Externality
2. It is a benefit that is enjoyed by a third-party as a result of an economic transaction.
 - A. Externality
 - B. Positive externality
 - C. Negative externality
 - D. Business Externality
3. Which of the following is an example of a negative externality?
 - A. Buying an electric car which reduces pollution.
 - B. Buying a bicycle which reduces pollution and congestion.
 - C. Building a cafe that employs previously homeless people.
 - D. Farmers use fertilizers and pesticides which harm insects.



4. Which of the following statements is NOT TRUE about positive externality?
- A. When consuming a product leads to benefits for other people.
 - B. The social benefit of consuming education is greater than your personal benefit.
 - C. If the person smokes in a crowded room, other people have to breathe the smoke.
 - D. None of the above
5. A tax placed on a good to take into account these external costs and move output closer to the level of social efficiency.
- A. Pigouvian tax
 - B. Progressive tax
 - C. Excise tax
 - D. Ad Valorem tax



RECAP

Directions: Enumerate the causes of market failures. Write your answer in the space provided below.

1. _____.
2. _____.
3. _____.
4. _____.
5. _____.



LESSON

Externalities

An externality is a cost or benefit caused by a producer that is not financially incurred or received by the producer. An externality can be either positive or negative and can stem from either the production or consumption of a good or service. The costs and benefits can be both private—to an individual or an organization—or social, meaning it can affect society as a whole. The externalities by nature are generally environmental such as natural resources or public health. For example, a negative externality is a business that causes pollution that diminishes the property values or health of people in the surrounding area. A positive externality includes actions that reduce transmission of disease or avoids the use of lawn treatments that runoff to rivers and thus contribute to excess plant growth in lakes. Externalities are different from donations of parkland or open-source software.

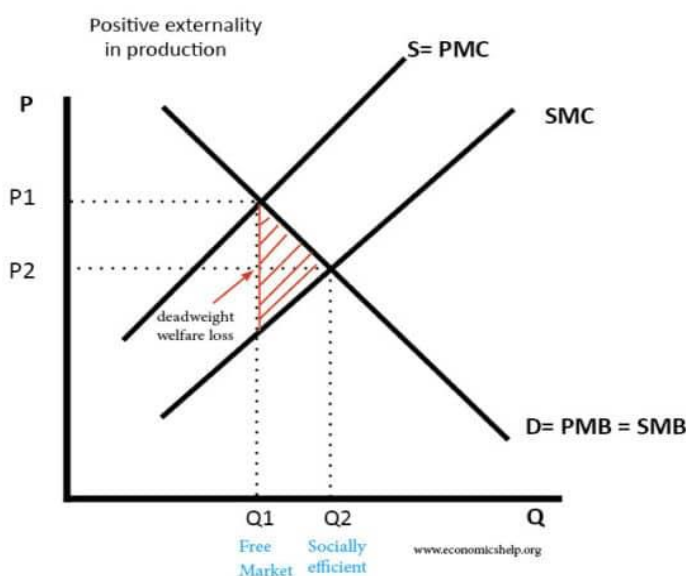
Positive Externalities

A positive externality is a benefit that is enjoyed by a third-party as a result of an economic transaction. While individuals who benefit from positive externalities without paying are considered to be free-riders, it may be in the interests of society to encourage free-riders to consume goods that generate substantial external benefits.

Positive Externalities in Production

For example, a farmer grows apple trees. An external benefit is that he provides nectar for a nearby beekeeper who gains increased honey as a result of the farmers' orchard. In this case, the social cost is less than the private cost. The beekeeper saves the cost of having to provide a source of nectar.

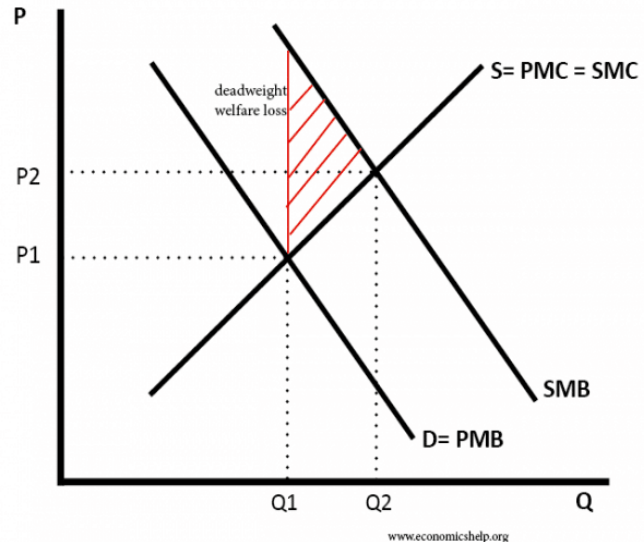
In this example, it works both ways. The beekeeper provides an external benefit to the apple grower because his bees help to fertilize the apple tree.



Another example, let say, a private school provides an external benefit because the workforce will be more educated in the future and it saves the cost of government education in a publically-funded school.

Positive Externality in Consumption

When consuming a product leads to benefits for other people. For example, if you take a three-year training course in information technology, you gain personal skills, but also other people in the economy can benefit from your knowledge. The social benefit of consuming education is greater than your personal benefit. Another example: buying an electric car which reduces pollution, and buying a bicycle which reduces pollution and congestion.

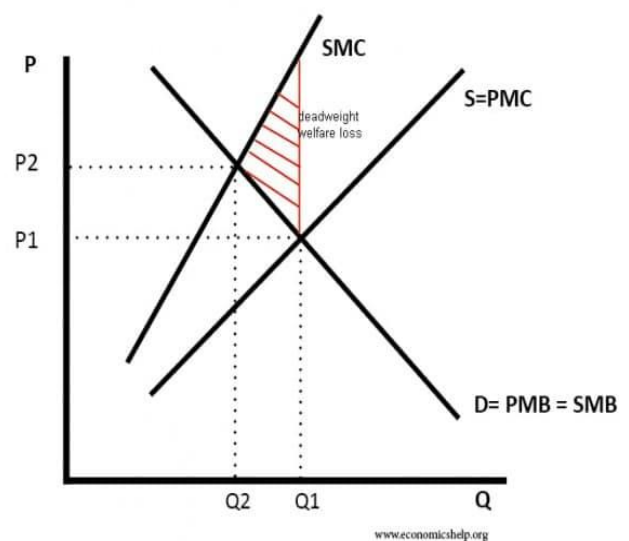


Negative Externalities

A negative externality is a cost that is suffered by a third party as a consequence of an economic transaction. In a transaction, the producer and consumer are the first and second parties, and third parties include any individual, organization, property owner, or a resource that is indirectly affected.

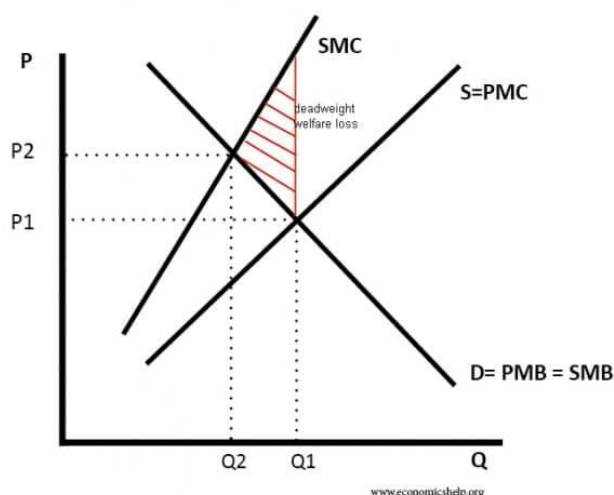
Negative Externality in Production

For example, making furniture by cutting down trees in the Cordilleria leads to negative externalities to other people. Firstly it harms the indigenous people of the Cordilleria. It also leads to higher global warming as there are fewer trees to absorb carbon dioxide. The social cost of making furniture is greater than the private cost to a firm. Another example of non-organic vegetable growing. Farmers use fertilizers and pesticides which harm insects and also can get into the food chain, causing health problems in the future.



Negative externality in consumption

When consuming a product causes costs to a third party. For example, if the person smokes in a crowded room, other people have to breathe the smoke. This is unpleasant for them and can leave them exposed to health problems associated with smoking. Other examples are: drinking alcohol and then driving can lead to accidents which hurt innocent bystanders, and playing loud music annoys your neighbor.

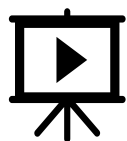


Pigou on Externalities

In 1920, Arthur C. Pigou wrote *The Economics of Welfare* which is an early exposition of this concept. Pigou noted that private business pursued their marginal private interests. However, industrialists were not concerned with any external costs to others in society. In other words, they had no incentive to internalize the full social costs of their actions and this led to a deadweight welfare loss. Pigou used an example of a contractor building a factory in the middle of a neighborhood.

The factory leads to external costs faced by those living in the locality. These external costs include pollution, congestion, damage to health, and loss of light.

Pigou also used the example of alcohol. Alcohol has a private benefit to firms but also the sale of alcohol leads to additional costs to society in terms of increased demand for healthcare and law and order. *Pigouvian tax* is placed on a good to take into account these external costs and move output closer to the level of social efficiency.



ACTIVITIES

Activity 1: Externalities

Directions: Think of three (3) business establishments in your area and enumerate their positive and negative externalities.

Business	Positive Externalities	Negative Externalities
1.		
2.		
3.		



Activity 2: My Policy for Negative Externalities

Directions: From the above list, choose one business establishment. Formulate one policy to tamper its negative externalities

Business	Negative Externalities	Policy



WRAP-UP

To summarize what you have learned in the lesson, answer the following questions:

1. What is a positive externality? negative externality?
2. What is the effect of the externalities on society?



VALUING

Reflect on this!

“Markets are lethal if only because of ignoring externalities, the impacts of their transactions on the environment.”

— Noam Chomsky



POSTTEST

Directions: Read each statement carefully. Write **T** if the statement is correct, otherwise write **F**.

- _____ 1. Pollution is a well-known negative externality.
- _____ 2. Externalities are positive when the social costs outweigh the private costs.
- _____ 3. Negative externalities occur when there is a positive gain on both the private level and social level.
- _____ 4. Taxes are one solution to overcoming externalities.
- _____ 5. A Pigovian tax is intended to tax the producer of goods or services that create adverse side effects for society.



KEY TO CORRECTION

PRETEST	POSTTEST:
1. D	1. T
2. B	2. F
3. D	3. F
4. C	4. T
5. A	5. T

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