

Summary

2.8 Market failure – externalities and common pool resources

| Subject | Year | Start date | Duration |
|-----------|------|-----------------|-----------------|
| Economics | IB1 | Week 1, January | 3 weeks 9 hours |

Course Part

2. Microeconomics

Description

2.8 Market failure – externalities and common pool resources, you should be able to:

- Be familiar with the following terms: market failure, allocative efficiency, merit goods, externality, demerit goods, negative externalities of production, positive externalities of production, positive externalities of consumption, negative externalities of consumption, emissions trading or cap and trade schemes, sustainability, sustainable development, common pool (or access) resources, carbon tax, pigouvian taxes, collective self-governance, tradable emissions permits, welfare loss.

The meaning of market failure and externalities

- Analyse the concept of market failure as a failure of the market to achieve allocative efficiency, resulting in an over-allocation of resources (over-provision of a good) or an under-allocation of resources (under-provision of a good).
- Describe the concepts of marginal private benefits (MPB), marginal social benefits (MSB), marginal private costs (MPC) and marginal social costs (MSC).
- Describe the meaning of externalities as the failure of the market to achieve a socially optimal output where $MSB = MSC$.

Negative externalities of production and consumption

- Explain, using diagrams and examples, the concepts of negative externalities of production and consumption, and the welfare loss associated with the production or consumption of a good or service.
- Explain that demerit goods are goods whose consumption creates external costs.
- Evaluate, using diagrams, the use of policy responses, including market-based policies (taxation and tradable permits) and government regulations, to the problem of negative externalities of production and consumption.

Positive externalities of production and consumption

- Explain, using diagrams and examples, the concepts of positive externalities of production and consumption, and the welfare gain associated with the production or consumption of a good or service.
- Explain that merit goods are goods whose consumption creates external benefits.
- Evaluate, using diagrams, the use of government responses, including subsidies, legislation, advertising to influence behaviour and create awareness, and the direct provision of goods and services.
- Calculate the welfare gain from a diagram (HL).

Common access resources and the threat to sustainability

- Describe, using examples, common access resources.
- Describe sustainability.
- Explain that the lack of a pricing mechanism for common access resources means that these goods may be overused/ depleted/degraded as a result of activities of producers and consumers who do not pay for the resources that they use, and that this poses a threat to sustainability.
- Explain, using negative externalities diagrams, that economic activity requiring the use of resources such as fossil fuels to satisfy demand poses a threat to sustainability.
- Explain that the existence of poverty in economically less-developed countries creates negative externalities through over-exploitation of land for agriculture, and that this poses a threat to sustainability.
- Evaluate, using diagrams, possible government responses to threats to sustainability, including legislation, carbon taxes,

cap and trade schemes, and funding for clean technologies.

- Explain, using examples, that government responses to threats to sustainability are limited by the global nature of the problems and the lack of ownership of common access resources, and that effective responses require international cooperation, monitoring and enforcement.

Inquiry & Purpose

Inquiry / Higher Order Questions

Type

Inquiry Questions

Skills-based

How different communities approach the managing of a common access resource.

Curriculum

Objectives

Application and analysis (AO2)

Analyse how economic information is used effectively in particular contexts

Synthesis and evaluation (AO3)

HL only: demonstrate economic synthesis and evaluation of the extension topics

Syllabus Content

1: Microeconomics

1.4 Market failure

Market failure as a failure to allocate resources efficiently:

Examine the concept of market failure as a failure of the market to achieve allocative efficiency, resulting in an over-allocation of resources (over-provision of a good) or an under-allocation of resources (under-provision of a good).

The meaning of externalities:

Explain the concepts of marginal private benefits (MPB), marginal social benefits (MSB), marginal private costs (MPC) and marginal social costs (MSC).

Describe the meaning of externalities as the failure of the market to achieve a social optimum where $MSB = MSC$.

Negative externalities of production and consumption:

Explain, using diagrams and examples, the concepts of negative externalities of production and consumption, and the welfare loss associated with the production or consumption of a good or service.

Explain that demerit goods are goods whose consumption creates external costs.

Evaluate, using diagrams, the use of policy responses, including market-based policies (taxation and tradable permits), and government regulations, to the problem of negative externalities of production and consumption.

Positive externalities of production and consumption:

Explain, using diagrams and examples, the concepts of positive externalities of production and consumption, and the welfare loss associated with the production or consumption of a good or service.

Explain that merit goods are goods whose consumption creates external benefits.

Evaluate, using diagrams, the use of government responses, including subsidies, legislation, advertising to influence behaviour, and direct provision of goods and services.

Common access resources and the threat to sustainability:

Explain, using examples, common access resources.

Apply the concept of sustainability to the problem of common access resources.

Examine the consequences of the lack of a pricing mechanism for common access resources in terms of goods being overused/depleted/degraded as a result of activities of producers and consumers who do not pay for the resources that they use, and that this poses a threat to sustainability.

Discuss, using negative externalities diagrams, the view that economic activity requiring the use of fossil fuels to satisfy demand poses a threat to sustainability.

Discuss the view that the existence of poverty in economically less developed countries creates negative externalities through over-exploitation of land for agriculture, and that this poses a threat to sustainability.

Evaluate, using diagrams, possible government responses to threats to sustainability, including legislation, carbon taxes, cap and trade schemes, and funding for clean technologies.

Explain, using examples, that government responses to threats to sustainability are limited by the global nature of the problems and the lack of ownership of common access resources, and that effective responses require international cooperation.

 Concepts

The market mechanism may result in socially undesirable outcomes that do not achieve efficiency, environmental **sustainability and/or equity**.

- Market failure, resulting in **allocative inefficiency** and welfare loss.
- Resource overuse, resulting in challenges to environmental **sustainability**.

 ATL Skills

 Approaches to Learning

 Communication

- In this unit, we will

provide opportunities for students to read and understand different types of texts

encourage or require students to plan a response before they begin

IB DP 12 EC 1 Group 3 (IB1)



Research

- In this unit, we will

give students advice on (or provide an opportunity for students to practise) narrowing the scope of a task to make it more manageable



Developing IB Learners

☆ Learner Profile



Principled



Caring



Reflective