AP Dojo

AP Microeconomics Unit 6 - Cheat Sheet

Unit 6 - Cheat Sheet

Enduring Understanding	Topic	Suggested Skills
POL-2	6.1 Socially Efficient and Inefficient Market Outcomes	2.A Using economic concepts, principles, or models, explain how a specific economic outcome occurs or what action should be taken in order to achieve a specific economic outcome.
POL-3	6.2 Externalities	4.B Demonstrate your understanding of a specific economic situation on an accurately labeled graph or visual.
	6.3 Public and Private Goods	1.B Identify an economic concept, principle, or model illustrated by an example.
POL-4	6.4 The Effects of Government Intervention in Different Market Structures	4.C Demonstrate the effect of a change in an economic situation on an accurately labeled graph or visual.
POL-5	6.5 Inequality	1.A Describe economic concepts, principles, or models.

Topic 6.1: Socially Efficient and Inefficient Market Outcomes

Socially Efficient Output: A situation in which the allocation of resources maximizes overall societal well-being or welfare.

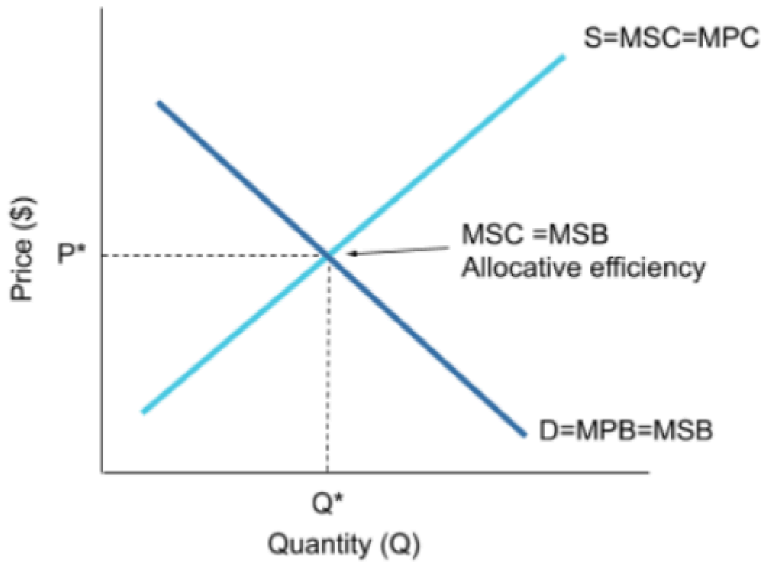
- takes place where marginal social benefit (MSB) = marginal social cost (MSC)

Marginal Social Benefit (MSB): the additional benefit received by all members of society due to the consumption or production of an additional unit of a good or service

- Example: Society benefits when someone buys an electric vehicle

Marginal Social Cost (MSC): the additional cost incurred by all members of society due to the consumption or production of an additional unit of a good or service

- Example: society incurs a cost when a company pollutes the environment



<u>Socially Inefficient Output</u>: A situation in which the allocation of resources does not maximize overall societal well-being or welfare (MSB DOES NOT EQUAL MSC)

- In the above graph, if a quantity greater or less than our socially efficient output was produced, there would be inefficiency in the market
- Sometimes inefficiency occurs because too much of a bad thing is being produced or consumed (ex: pollution produced or cigarettes consumed)
- Sometimes inefficiency occurs because too little of a good thing is being produced or consumed (ex: electric vehicle production or flu shot consumed)

Topic 6.2 - Externalities

Tips for Reading Externality Graphs: (SUPER IMPORTANT)

- Remember that MSB = MSC is where we want to be
- There are two types of externalities:
  - Production externality: when too much or too little of a good is being produced
  - Consumption externality: when too much or too little of a product is being consumed
- Production externalities always have two cost curves (a marginal private cost and a marginal social cost)
- Consumption externalities always have two benefit curves (a marginal private benefit and a marginal social benefit)
- Negative externalities always produce too much of the good
- Positive externalities always produce too little of the good
- Deadweight loss is the triangle pointing to MSB and MSC

Draw the following:

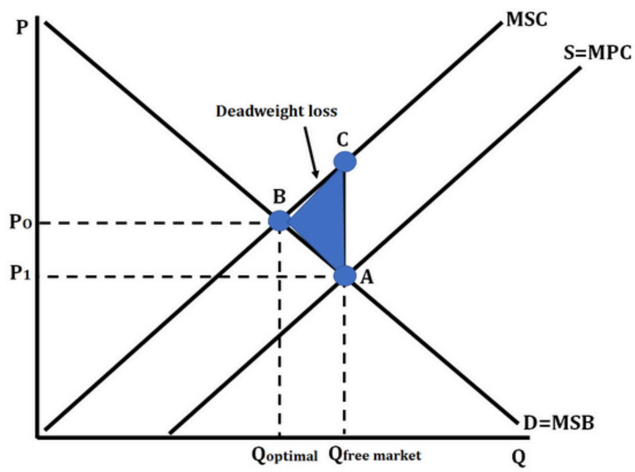
1) Negative production externality
2) Positive production externality
3) Negative consumption externality
4) Positive consumption externality

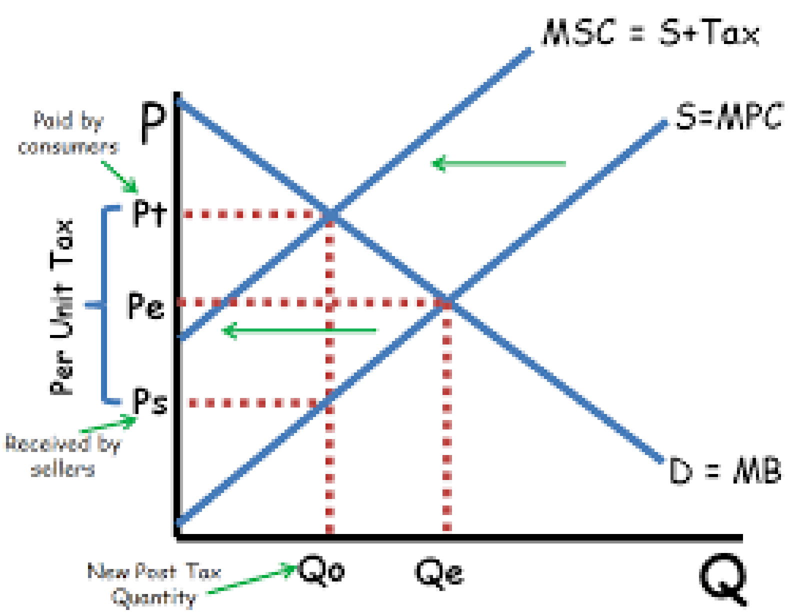
Externality: when a third-party (someone who is not involved in an interaction) either suffers or benefits from that interaction

- There is either external benefit or external cost, outside of the private benefit and cost

Negative Externality: when the consumption or production of a good or service imposes costs on third parties who were not involved in the consumption or production. It leads to an overallocation of resources from a societal perspective.

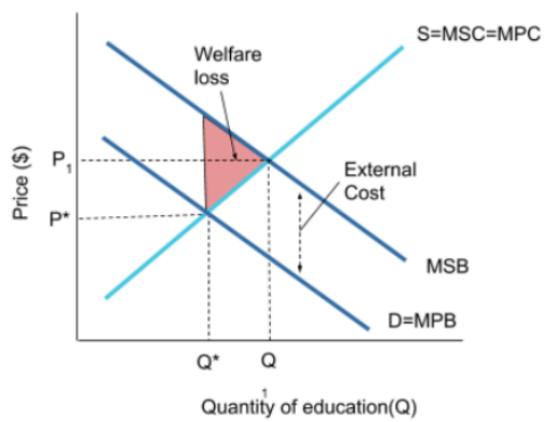
- <u>How to solve it</u>: the government should tax the production or consumption of the good, to encourage less of it





Positive Externality: when the consumption or production of a good or service results in benefits to third parties who were not involved in the interaction. It leads to an underallocation of resources from a societal perspective.

- How to solve it: the government should subsidize the production or consumption of the good, to encourage more of it



Topic 6.3: Public Goods

Public Good: A type of good that is *non-rivalrous* and *non-excludable*, and therefore is often provided by the government, rather than private companies

- Private companies have no way of earning a profit, and therefore have no incentive to provide these goods
- The government steps in and provides them for society
- EX: public parks, roads, national defense

Market Failure: an economic situation where private businesses have no incentive to provide goods or services that are necessary or beneficial for society, because they have no reasonable way to charge customers

- Occurs when goods are non-rival and non-excludable

	Excludable	Non-Excludable
Rival	Shoes, Ice cream, gasoline	Public fishing area, common grazing area
Non-Rival	Netflix, Spotify Premium	Sidewalk, public parks, fireworks show

Non-Excludable: A characteristic of a good or service for which it is costly or impossible for businesses to exclude non-payers others from using it

- Fireworks show, public park, national defense, roads, etc.

Non-Rival: A characteristic of a good or service for which one person's consumption does not reduce the quantity available for others to consume

- Can you enjoy the good or service at the same time another person enjoys the same good or service?
- Netflix, YouTube, fireworks show, roads, etc.

<u>Tragedy of the Commons:</u> a situation in which individuals with access to a public resource (also called a common) act in their own interest and, in doing so, ultimately deplete the resource

- Example: local fishermen overfish a public body of water, to the point where they kill off all of the fish, leaving no fish for anyone

<u>Free-Rider Problem:</u> a type of market failure that occurs when those who benefit from resources, public goods and common pool resources do not pay for them or under-pay

- People know they can still use the good or service, even if they don't pay
- Because of that, many people don't want to pay, they would rather "free-ride"
- The free-rider problem makes market demand seem less than it actually is

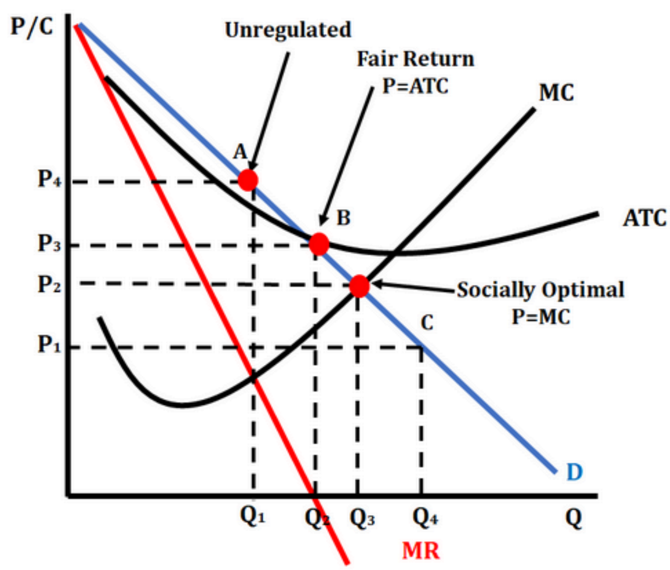
- Monopolies tend to produce too little and charge a price that is too high

Topic 6.4: Effects of Government Intervention in Different Market Structures

<u>Antitrust Laws</u>: rules and regulations that prevent firms from monopolizing trade and help to promote competition (*** Antitrust laws work to reduce the market power of certain firms)

- Antitrust laws discourage monopolies due to their inefficiencies
- Monopolies produce too little output and charge a price higher than marginal cost
- Antitrust laws are often aimed at stopping COLLUSION and PRICE-FIXING

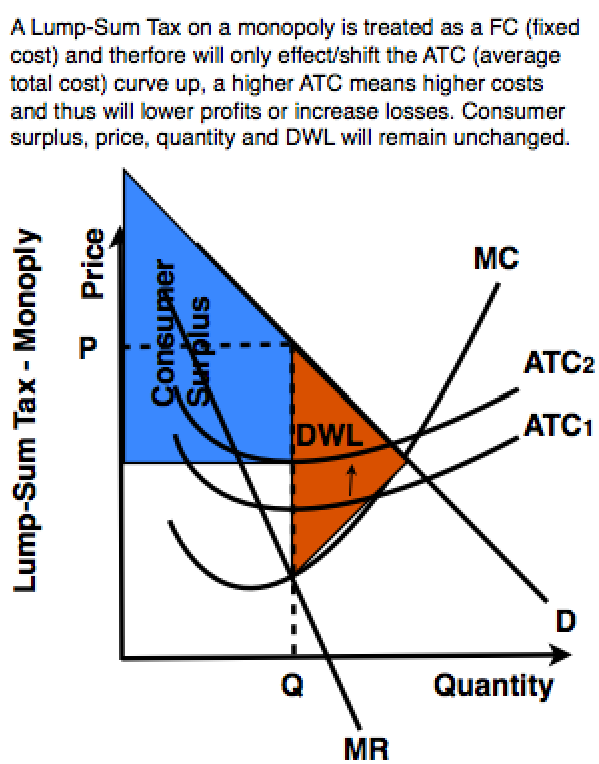
<u>Fair Return Pricing</u>: a form of government regulation on monopolies, where a price ceiling is set at the point (P = ATC), meaning that the monopolies earns normal economic profits



<u>Lump-Sum Tax</u>: a one time fixed tax

- **Example:** Apple is taxed a one time fee of $500

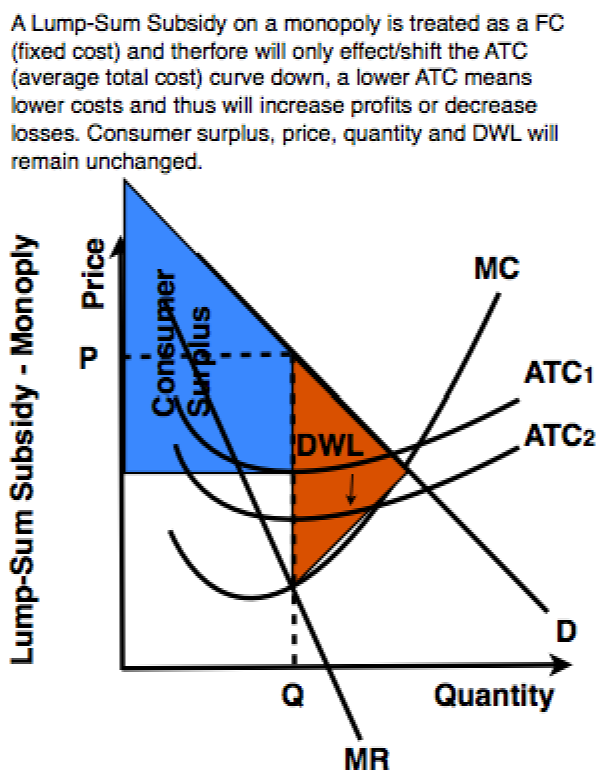
- Amount of tax is fixed, does not change based on production levels
- **COST CURVE(S) IMPACTED:** Fixed cost curve, total cost curve
- This type of tax DOES NOT impact level of production or price
- This type of tax DOES impact the monopoly's profits



Lump-Sum Subsidy: a one time fixed subsidy

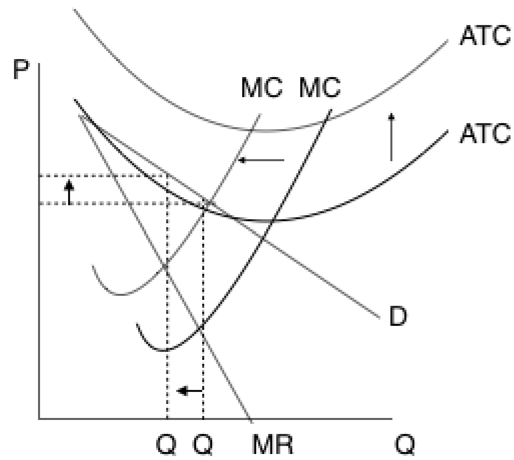
- **Example:** Tesla is provided with funds of $10 million dollars to help produce EVs
- This type of subsidy DOES NOT impact level of production or price

- This type of subsidy DOES impact the monopoly’s profits



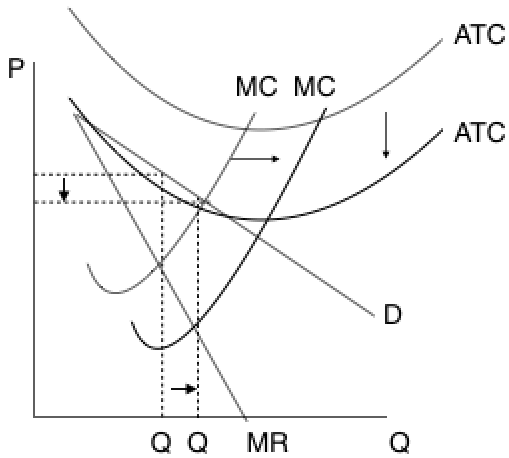
<u>Per-Unit Tax</u>: a smaller tax on every unit produced

- **Example**: Apple is taxed a small fee for every IPhone produced
- Amount of tax is variable, depends on production levels
- **COST CURVE(S) IMPACTED**: Marginal cost curve, average total cost curve
- This type of tax DOES impact level of production or price
- This type of tax DOES impact the consumer surplus, DWL, and the monopoly’s profits



<u>Per-Unit Subsidy</u>: a smaller subsidy on every unit produced

- **Example:** Tesla receives a small government payment for each EV that is produced
- **COST CURVE(S) IMPACTED**: Marginal cost curve, average total cost curve
- This type of subsidy DOES impact level of production or price
- This type of subside DOES impact the consumer surplus, DWL, and the monopoly's profits



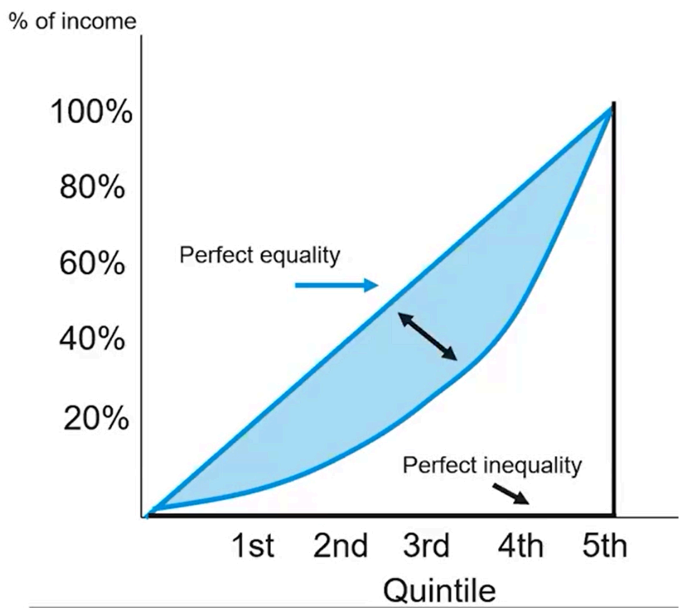
Topic 6.5: Inequality

Income Inequality: the extent to which income is evenly or unevenly distributed within a society

- Income is NOT just wages. Income includes wages, rent, profits, and interest

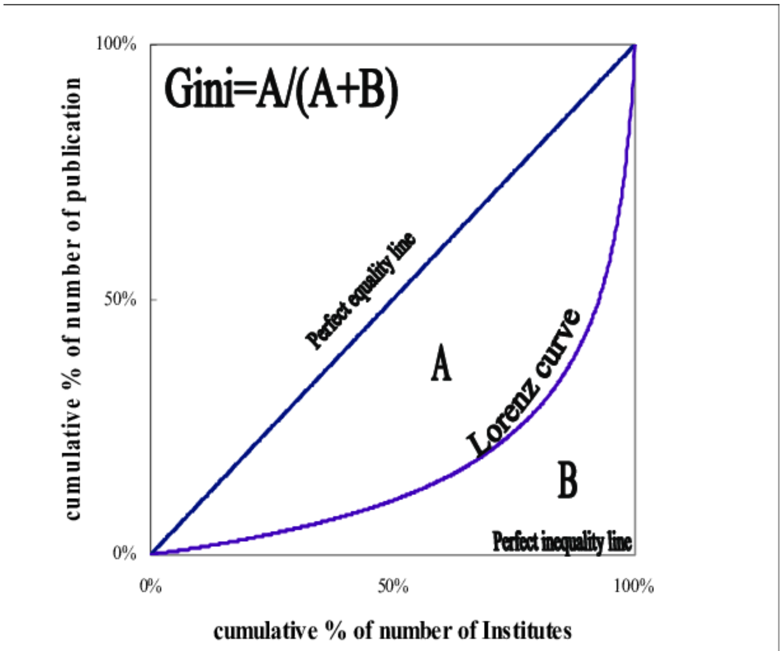
Lorenz Curve: a graphical representation of the distribution of income or of wealth

- The closer an economy is to the “line of equality”, the more equally its resources are distributed
- The further an economy is from the “line of equality”, the less equally its resources are distributed



<u>Gini Coefficient:</u> measures levels of inequality in a society using the areas found on the Lorenz curve

- The larger the coefficient, the greater the level of inequality
- See the picture below for the gini coefficient formula



<u>Progressive Tax</u>: a tax that takes a higher percentage from wealthier individuals and a lower percentage from less wealthy individuals

- Income tax in the US (and many other countries) is an example of a progressive tax
- Progressive tax systems are often used to achieve greater income equality

<u>Regressive Tax</u>: a tax in which the tax rate increases as the taxable amount decreases

- Sales tax is an example of a regressive tax
- **EX**: Two people buy the same TV for $500. Each person must pay a tax worth 10% of the purchase, or

$50. This tax accounts for a larger portion of the poorer individual's income.

Proportional Tax: a tax in which the tax rate remains constant regardless of income level or taxable income

Estate Tax (Inheritance Tax): a tax paid on the value of the property, money, and other assets of someone who has died (if it's above a certain value)

Gift Tax: a federal tax on a transfer of money or property to another person while getting nothing (or less than full value) in return