

EXTERNALITIES

Efficient Markets

Competitive markets...

- are efficient
- maximize _____
- "work" ... allocate

Assumptions...

...perfect information

...no _____

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Efficient Markets

- **market failure**, when the market _____ society's resources efficiently. Causes (e.g.):

- **market power**, a _____ buyer or seller has substantial influence on market price

externalities, the _____ of a market exchange on the well-being of a bystander; (aka "spillover" or "_____ effects")

Governments can sometimes improve _____.

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Externality

Externalities can be **negative** or **positive**: self-interested buyers and sellers _____ the external costs or benefits of their actions....

_____ **Ext.** _____

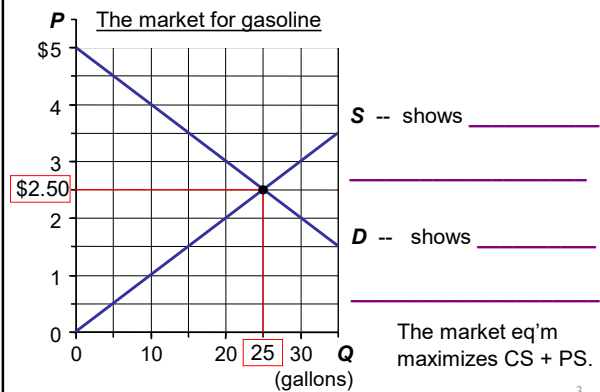
_____ **Ext.** _____

.....so the market outcome is not efficient.

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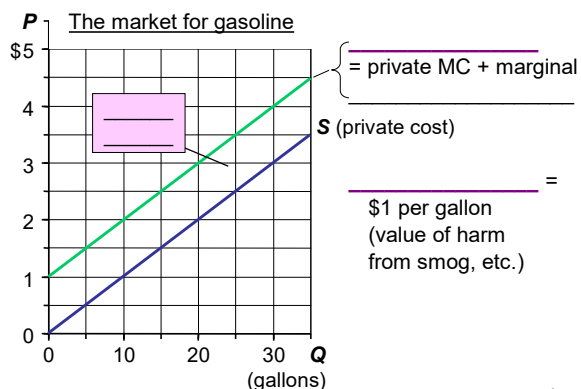
Recall...Welfare Economics



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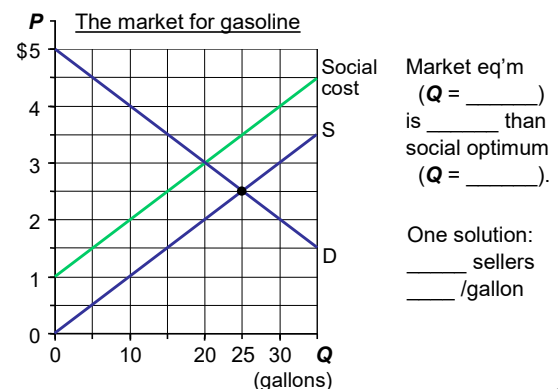
Analysis of a Negative Externality



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Analysis of a Negative Externality



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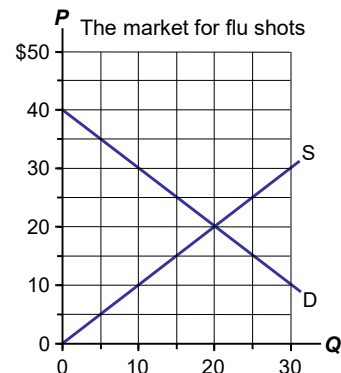
Positive Externalities

With a positive externality, the **social value** of a good includes

- _____ – WTP (benefit)
- _____ – the value of the positive impact on bystanders

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Analysis of a positive externality...



External benefit
= \$10/shot

- Draw the social value curve.
- Find the socially optimal **Q**.
- What policy would internalize this externality?
- What happens to total surplus?

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Effects of Externalities:

If negative externality

- market quantity _____ than socially desirable

If positive externality

- market quantity _____ than socially desirable

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"Internalizing the Externality"

Internalizing the externality: _____ ...
so people consider the external effects of their actions

When market participants must consider social costs or benefits, the market eq'm _____ social optimum.

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Public Policies Toward Externalities

1) _____ -- regulate behavior directly, e.g...

- _____ on quantity of pollution emitted
- technology requirements
- require immunizations

2) _____ -- provide incentives to private decision-makers to change behavior, e.g...

- corrective _____
- tradable pollution permits

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Corrective Taxes & Subsidies

Corrective tax/sub:

- aligns _____ interests (incentives)
- ideal corrective tax = _____
- ideal corrective subsidy = _____
- different from "other" taxes/subs which distort incentives/market
- results in more efficient market: _____

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Tradable Pollution Permits

Pollution permit system:

- Permits are issued with a face "pollution" value
- A market for permits is established
- _____ of permits (inelastic **S**)
- Firms with higher abatement costs _____
- Firms with lower costs _____

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Compare and Contrast Policies

Goals:

- 1) Reduce _____ ... pollution.
 - 2) Efficient outcome: Firms with lowest abatement costs _____.
- Lowest cost solution
 - Role of incentives

_____ : * Regulation; * technology requirement;

_____ : * corrective tax; * tradable pollution permit

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Private Solutions to Externalities

- Moral codes and social sanctions, e.g., the "Golden Rule"
- _____, e.g., the Sierra Club
- _____ between market participants and the affected bystanders

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Private Solutions to Externalities

The _____ theorem:

If private parties can costlessly _____ over the allocation of resources, they can solve the externalities problem _____.

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Why Private Solutions Do Not Always Work

1. _____ :
The costs incurred in the process of agreeing to and following through on a bargain.
2. _____ :
Even if a beneficial agreement is possible, each party may hold out for a better deal.
3. _____ :
If # of parties is very large, coordinating them may be costly, difficult, or impossible.

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