

FOUNDATION COURSE IN MANAGERIAL ECONOMICS

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Lecture 10: Supply Demand and Government
Policies

Why do governments intervene?

- Markets sometimes fail and then government needs to intervene
- A difficult trade off that society faces – efficiency vs equity
- Government may raise the price in some cases and may lower in others
- Market equilibrium is disrupted

Questions we ask this week are:

- How does the government intervene in the market?
- What are price ceilings and price floors?
- How do they affect the market outcome?
- How do taxes affect market equilibrium?
- Is there any difference in outcome if the tax is imposed on the buyer or the seller?
- What is the incidence of a tax and what determines the incidence?

Government Interventions

- **Price Controls:**

- Price Ceiling – A legal maximum price set by the government for a particular good or service, e.g. rent control, or price cap on drugs
- Price Floor – A legal minimum price set by the government for a particular good or service, e.g. minimum wage, or price floor on agricultural products

- **Taxes**

- Can be on buyers or sellers
- Can be a percentage of the price of a good, or a specific amount per unit purchased/sold

Impact of Price Ceiling

- Shortages leading to Rationing
- Rationing mechanism – either first come first serve basis or seller's whims
- Resulting in inefficiency in the market

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Lecture 11: Price Ceilings and Price Floors

Price Floor

- Example – Minimum wage or minimum price of agricultural produce, say wheat
- Minimum wage does not affect highly skilled workers
- Price controls disrupt the role of prices as signals for both buyers and sellers
- Policies intended to help the society often end up hurting them

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Lecture 12: Taxes

Tax on Buyers

- Tax on buyers, shifts the demand curve down by the amount of the tax
- The new demand curve shows buyer's demand as function of price that the sellers receive
- The old demand curve is function of total price
- Incidence of tax shows how much of the burden of taxation is shared between the buyer and sellers

Tax on Sellers

- Tax on sellers, shifts the supply curve up by the amount of the tax
- The new supply curve shows that the seller's cost per unit of good sold has gone up by the amount of the tax
- The old supply curve shows the price received by the seller before tax
- ***Incidence of tax is same whether the tax is imposed on the buyer or seller***

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Lecture 13: Elasticity and Incidence of Taxes

Elasticity and impact of taxes

- If Supply is more elastic than Demand, buyers bear more of the tax burden
- Supply is more flexible, so easier for suppliers to leave the market than consumers
- When Demand is more elastic than Supply, sellers bear more of the tax burden
- Demand is more flexible, i.e. buyers have more choices and can shift away more easily

Examples

- Luxury Tax
 - Demand is more elastic than Supply
 - Suppliers bear most of the tax burden
- Tax on cigarettes
 - Supply is more elastic than Demand
 - Smokers bear most of the tax burden

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Lecture 14: Efficiency and Government Intervention

Concepts that we learn in this module

- Producer surplus – how is it related to the supply curve
- Consumer surplus – how is it related to the demand curve
- What we understand by market efficiency
- What happens to efficiency when government intervenes

Welfare economics

- Market equilibrium leads to allocation of resources
- Is the outcome efficient?
- What happens to economic well being of producers and consumers?
- Well being of consumers measured by **Consumer Surplus**
- Well being of producers measured by **Producer Surplus**

Willingness to Pay (WTP) and the Demand Curve

- A buyer's WTP is the maximum amount that the buyer would be willing to pay for a unit of a good, and,
- **Consumer surplus** is the amount a buyer is willing to pay minus the amount the buyer actually pays
- So, a higher price in the market reduces the CS

Cost and the Supply curve

- Cost is a measure of Willingness to sell
- **Producer surplus** is the amount a seller gets from the market minus the seller's cost
- A lower price reduces the PS

Hence,

$$\text{Total surplus in a market} = CS + PS$$

- Efficiency in the market means total surplus is maximized

Efficiency

- The goods are consumed by the buyers who value them most highly.
- The goods are produced by the producers with the lowest costs.
- Raising or lowering the quantity of a good would not increase total surplus.
- Is the market equilibrium an efficient outcome?