Module 3a: Basic Demand and Supply

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Markets

The Law of Demand

The Demand Schedule Curve

Shifts in Demand: The Determinants

Changes in Demand vs. Changes in Quantity Demanded

Markets

Markets

- Arrangements (or locations) that individuals have for exchanging with one another
- Represent the (voluntary) interaction of buyers and sellers
- Markets set the prices and amount we pay and receive (terms of exchange)

Examples of Markets

Examples of Markets:

- Markets for gasoline
- Markets for labor
- Stock market
- Market for Super Bowl tickets
- Market for (black) shoes
- Secrets

Markets and Prices

An economic system that allocates resources based on relative prices determined by supply and demand.

Prices signal what is relatively scarce and relatively abundant.

Why Diamonds Cost more Than Water?

Figure 1: Water vs Diamonds

Markets and Auctions

English (ascending price)

- Most common, open competitive bidding (may have reserve price and set incremental pricing).
- Price is determined by own bid, but not true value
  - Problem: multiple bids, sniping
  - Solution: Proxy bidding

First Price, Sealed Bid (ascending price)

- Like English, except sealed (may have reserve price and set incremental pricing).
- Price is determined by own bid, bid lower than true value, no multiple bids
  - Examples: London Gold Exchange, foreign exchange

Markets and Auctions

Second Price, Sealed Bid: Vickrey (similar to Proxy Bidding)

- Winning bidder pays second highest price (displayed as current highest).
- Price is determined by other's bid.
- It is the best option to revealed your true value for the item.
- Help Google to arrange its multiple bidding problem.

Dutch (descending price)

- Price descending auction used to sell cut flowers in Holland.
- Used to sell items quickly, bid lower than true value.
  - Example: U.S. Bond market

The Law of Demand

Demand

Demand relates quantities of specific goods or services that individuals or groups, will purchase at various possible prices, other things being constant.

Demand reflects a decision about which wants to satisfy.

The law of demand states that the quantity demanded is inversely (negatively) related to price, all things equal.

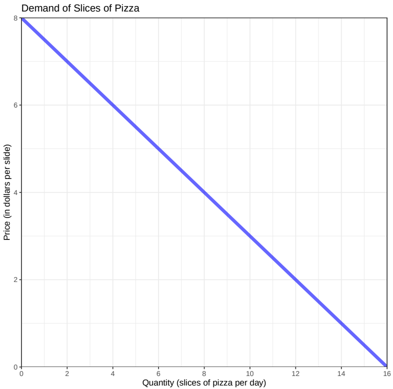
The law of demand

Substitution effect states that when the relative price (opportunity cost) of a good or service rises, people seek substitutes for it, so the quantity demanded of the good or service decreases.

Income effect states what when the price of a good or service rises relative to income, people cannot afford all the things they previously bought, so the quantity demanded of the good or service decreases.

The Demand Schedule Curve

Graphical representation of the Demand Curve



Demand Schedule

	price_d	quantity_d
1	8	0
2	7	2
3	6	4
4	5	6
5	4	8
6	3	10
7	2	12
8	1	14
9	0	16

Willingness and Ability to Pay

A demand curve is also a willingness-and-ability-to-pay curve.

The smaller the quantity available, the higher is the price that someone is willing to pay for another unit. Willingness to pay measures marginal benefit.

Willingness and Ability to Pay (Vertical Interpretation)

At any given price, what is the total quantity that potential consumers would be willing and able to purchase? (*horizontal interpretation*)

- At a price of **\$6**, consumers would want to **4** buy units

Alternatively: For a given quantity, what is the value (willingness to pay) for the marginal buyer? (*vertical interpretation*)

- The consumer who would buy the **4th** slice of pizza would pay up to **\$6** for it.

Shifts in Demand: The Determinants

Determinants of demand

Income

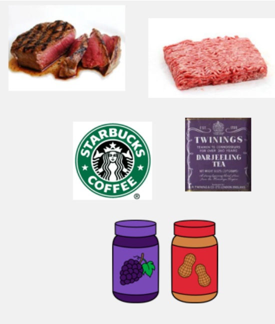
- Normal
- Inferior

Tastes and preferences

The price of related goods

- Complements
- Substitutes

Market size (number of buyers)



Changes in Demand vs. Changes in Quantity Demanded

Changes in Demand vs. Changes in Quantity Demanded

A change in one or more of the non-price **determinants** (income, tastes, etc.) will lead to a **change in demand**.

This is a movement of the curve.

A change in a good's own price leads to a change in **quantity demanded**. This is a movement on the curve.

Changes in Demand vs. Changes in Quantity Demanded (Examples)

Changes in Demand

Changes in Quantity Demanded