REVISION SLIDE 1

DEMAND & SUPPLY

OUTLINE

- Introduction

- Demand
- Consumer Surplus

- Supply
- Producer Surplus

INTRODUCTION

Market is a place where buyers and sellers engage in exchange of a good or service.

Standard Assumptions of Demand & Supply Model

1) Many "Atomistic or Small" Sellers and Buyers
2) Identical Products among Sellers
3) No Barriers to Entry/Exit
4) Perfect Information

Because of these assumptions, sellers and buyers are "PRICE TAKERS".

The "Price" is determined by the **market forces** (demand & supply).

BUT the government may influence price through intervention.

DEMAND

Individual Demand is the amount of a good or service that an individual consumer is willing and able to buy at a given price.

Market Demand is the sum of all individual demand at a given price.

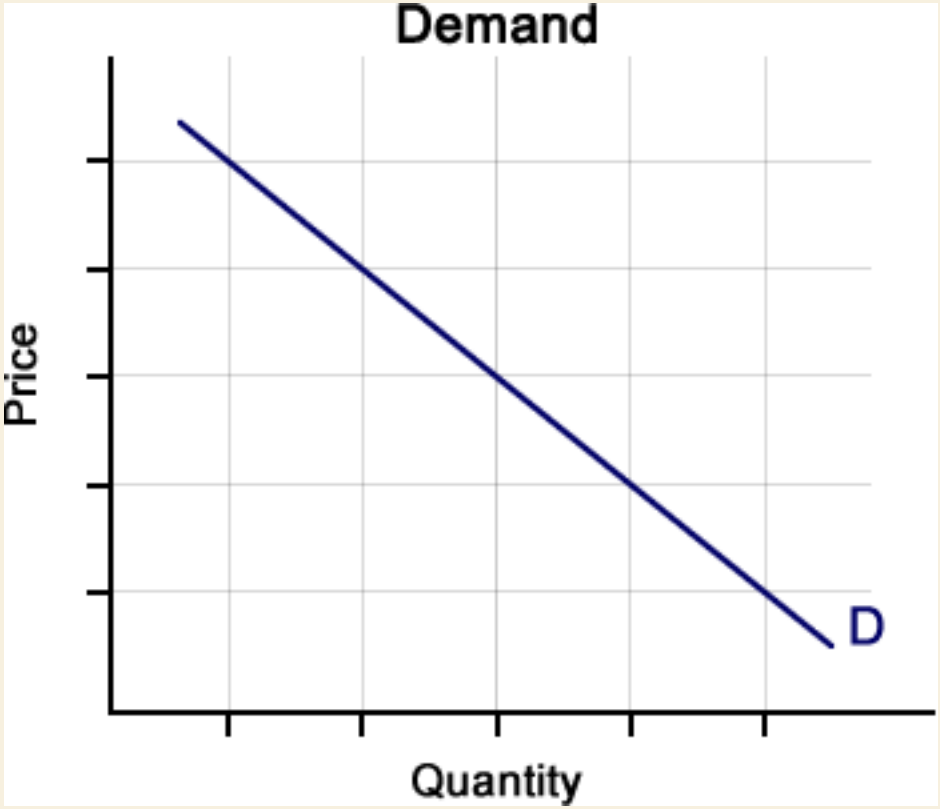
Derived Demand is the demand for a good that is derived from the production and sale of other goods, e.g. demand for labor is derived from demand for the product.

The demand curve we usually draw is the Market Demand.

DEMAND CURVE

The demand curve shows a negative relationship between price (P) and quantity demanded (Qd).

Law of Demand: Ceteris Paribus, as P rises, Qd falls, and vice versa.



LINEAR DEMAND EQUATION

Demand Equation is expressed as Qd as a function of P: Qd = f(P)

e.g. Qd = 10 – 2P

However, what we usually draw is the "Inverse Demand Curve".

Inverse Demand is expressed as P as a function of Qd: P = f(Qd)

e.g. From Qd = 10 – 2P

2P = 10 – Qd

we get P = 5 – (½)Qd as the inverse demand equation.

DETERMINANTS OF DEMAND

Price Determinant:

1) Price

Non-Price Determinants:

1) Income: Normal Good or Inferior Good
2) Price of Related Products: Prices of Substitutes or Complements
3) Taste, Preference, Advertising
4) Demographic Factors: Population Size and Age Groups
5) Government Policies, e.g. income tax

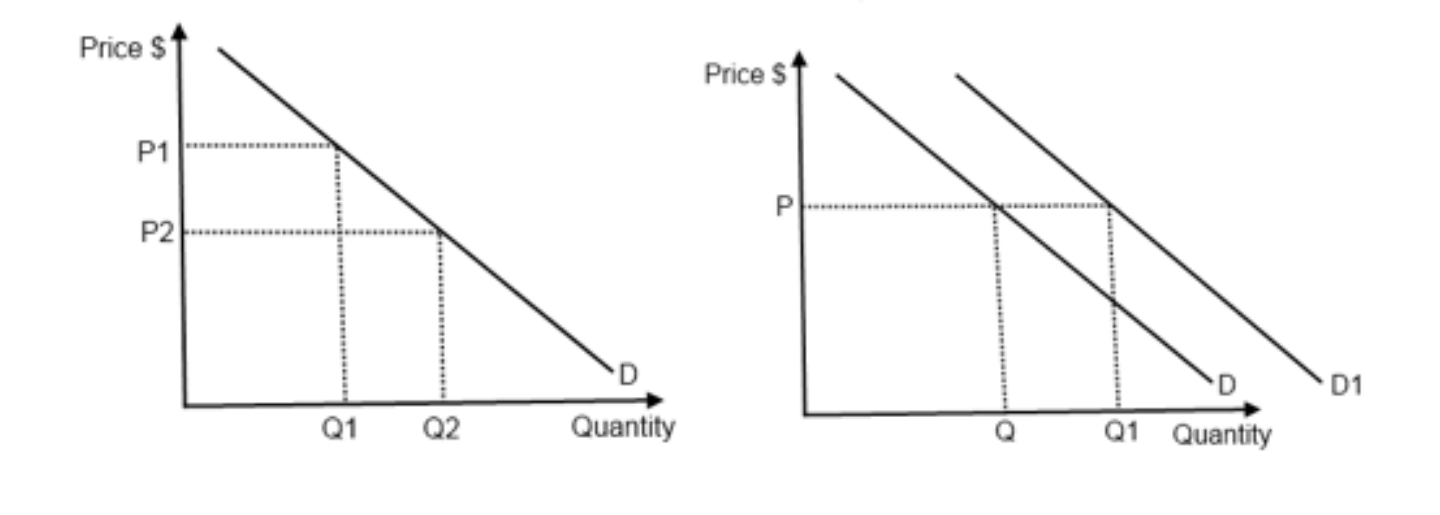
CHANGE IN DEMAND CURVE

Movement along the demand curve is caused by a change in the PRICE Determinant of demand.

i.e. when P falls, Qd rises.

Shift of the demand curve is caused by a change in the NON-PRICE Determinant of demand.

i.e. when income rises, Qd rises at ALL prices.



TYPES OF GOODS

Categorized based on a change in income:

1) Normal Good: a good that is demanded more as income rises

   e.g. most goods are normal, as we buy more when we are richer

2) Inferior Good: a good that is demanded less as income rises

   e.g. own-brand products

Categorized based on how goods are related:

1) Substitutes: a good that can replace another good

   e.g. Coke and Pepsi

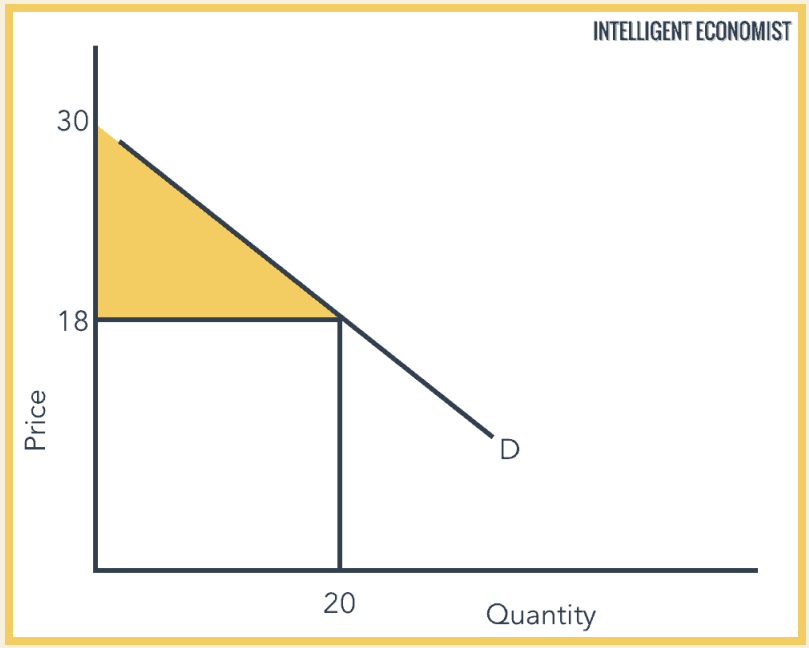
2) Complements: a good to be used together with another good

   e.g. gasoline and car toothbrush and toothpaste

CONSUMER SURPLUS

Consumer Surplus is a measure of consumer welfare, expressed in monetary terms.

It is the difference between the price consumers are willing to pay (indicated by the demand curve) and the price they are actually paying (indicated by the MARKET price, not necessarily the equilibrium price).



CS = Area below demand curve and above the mkt price

= (½)(30-18)(20) = 120 $

SUPPLY

Individual Supply is the amount of a good or service that an individual producer is willing and able to sell at a given price.

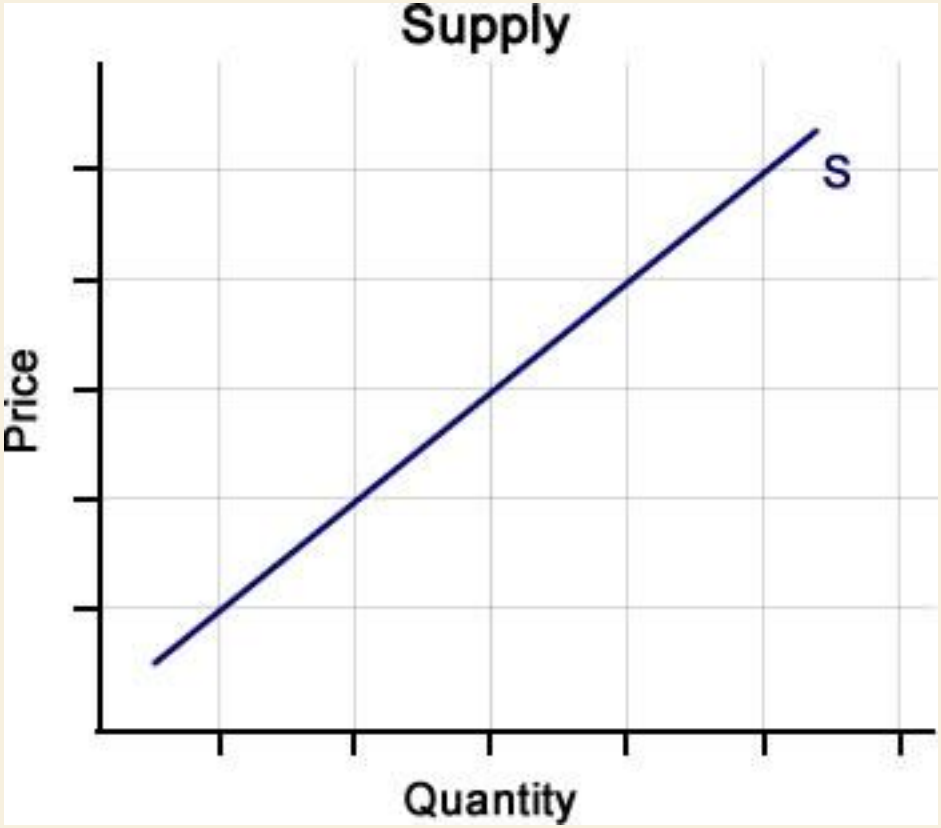
Market Supply is the sum of all individual supply at a given price.

The supply curve we usually draw is the Market Supply.

SUPPLY CURVE

The supply curve shows a positive relationship between price (P) and quantity supplied (Qs).

Law of Supply: Ceteris Paribus, as P rises, Qs rises, and vice versa.



LINEAR SUPPLY EQUATION

Supply Equation is expressed as Qs as a function of P: Qs = f(P)

e.g. Qs = 10 + 2P

However, what we usually draw is the "Inverse Supply Curve".

Inverse Supply is expressed as P as a function of Qs: P = f(Qs)

e.g. From Qs = 10 + 2P

2P = Qd – 10

we get P = (½)Qd – 5 as the inverse supply equation.

DETERMINANTS OF SUPPLY

Price Determinant:

1) Price

Non-Price Determinants:

1) Cost of Production, e.g. wage and material cost
2) Price of Related Products: joint supply and competitive supply
   - Joint supply: goods that are produced together, e.g. meat and leather
   - Competitive supply: goods that compete each other for the same factors of production, e.g. iPhone and iPad
3) Technology
4) Supply Shocks, e.g. bad weather or discovery of new resources
5) Government Policies, e.g. output tax and subsidy

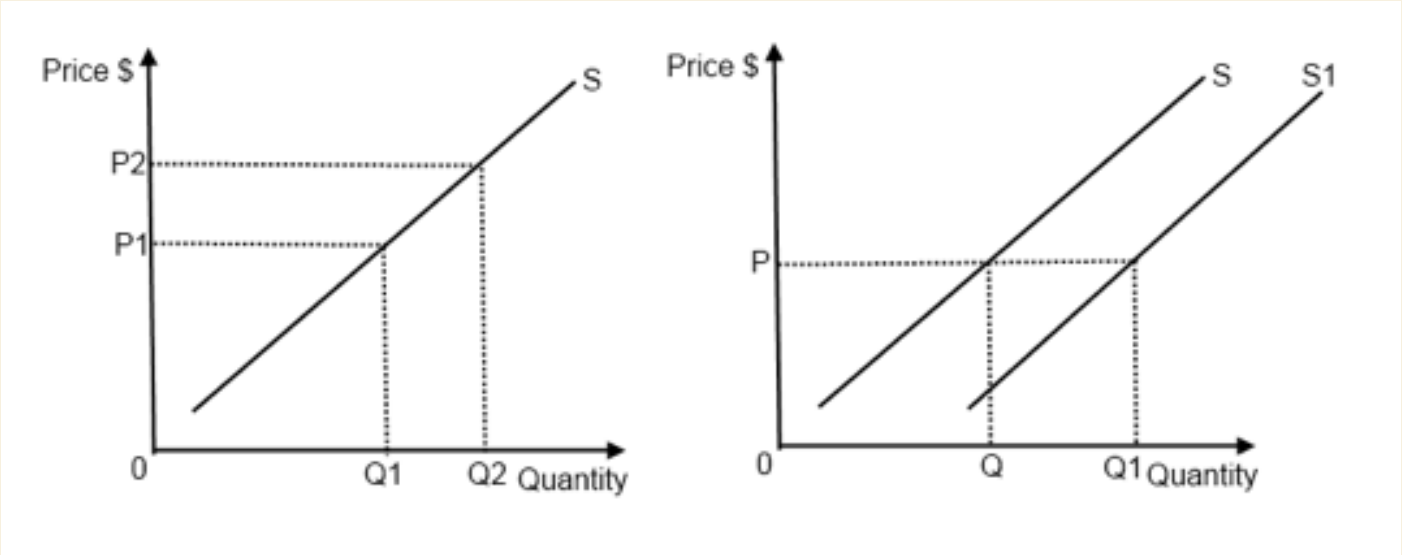
CHANGE IN SUPPLY CURVE

Movement along the supply curve is caused by a change in the PRICE Determinant of supply.

i.e. when P rises, Qs rises.

Shift of the supply curve is caused by a change in the NON-PRICE Determinant of supply.

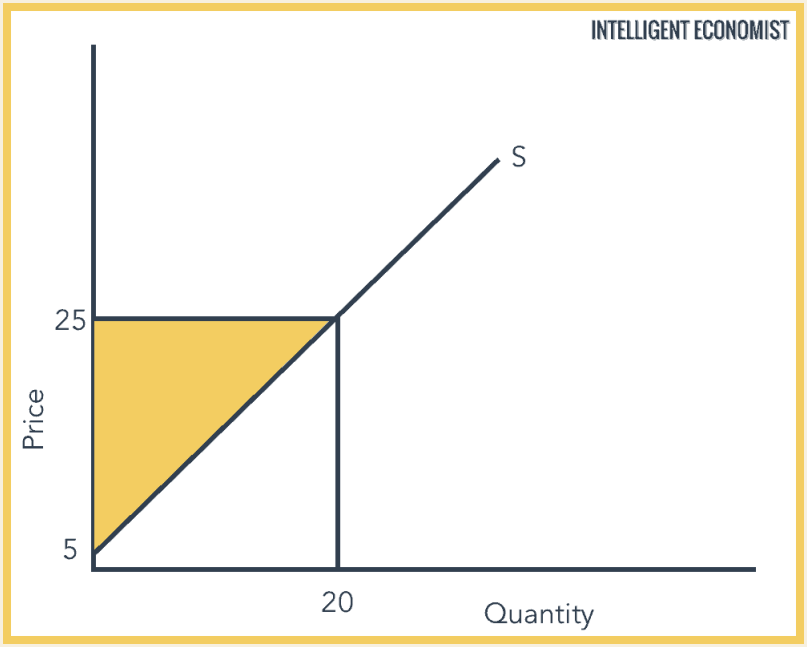
i.e. when cost of production falls, Qs rises at ALL prices.



PRODUCER SURPLUS

Producer Surplus is a measure of producer welfare, expressed in monetary terms.

It is the difference between the price producers are willing to sell (indicated by the supply curve) and the price they are actually selling (indicated by the MARKET price, not necessarily the equilibrium price).



PS = Area above supply curve and below the mkt price

= (½)(25-5)(20) = 200 $