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UPSC Civil Services Examination

UPSC Notes [GS-III]

Topic: Demand & Supply - UPSC Economy Notes

What is the Demand Curve?

The demand curve is defined as the relationship between the price of the good and the amount or quantity the consumer is willing and able to purchase in a specified time period, given constant levels of the other determinants–tastes, income, prices of related goods, expectations, and the number of buyers.

Determinants of Demand

There are five determinants of demands:

1. Price of the good
2. Taste or level of desire for the product by the buyer
3. Income of the buyer
4. Prices of related products:
    - Substitute products (directly competes with the good in the opinion of the buyer; e.g. tea & coffee)
    - Complementary products (used with the good in the opinion of the buyer; e.g. car & petrol)
5. Future expectations:
    - Expected income of the buyer
    - Expected price of the good.

Changes That Decrease Demand

The following changes decrease demands:

1. Decrease in the price of a substitute
2. Increase in price of a complement
3. Decrease in income if good is normal good
4. Increase in income if good is inferior good

Elasticity of Demand

A measure of the sensitivity of the quantity variable (Q) to changes in the price variable (P.) Elasticity answers the question of how much the quantity will change in percentage terms for a 1% change in the price, and is thus important in determining how revenue will change.

Inelastic demand curve is steep because even a large change in P causes little change in Q. An example is foodgrains – even if the price is increased a lot, people will not cut down on eating foodgrain; and if P decreases, people will not start eating more!

What is Supply?

The concept of supply can be understood following the below-given explanation:

1. The quantity of a commodity which a firm is willing to sell at a particular price
2. Follows the 'supply curve'

Higher the price, greater the incentive for the firm to sell more.

Supply will increase:

Profit = Total Revenue – Total Cost

Revenue = Money received through the sale of output = Price (P) x Quantity (Q)

All other things remaining constant, higher price leads to higher profits Law of Demand – When price increases, quantity demanded (Qd) decreases Law of Supply – When price increases, quantity supplied (Qs) also increases Determinants of Supply.

Determinants of Supply

The following are the determinants of the supply:

1. Cost of production – if it increases, supply decreases. The shifts in the supply curve:
    - If the cost of production increases, the quantity supplied will reduce and the supply curve will shift leftwards
    - If the cost of production decreases, the quantity supplied will increase. The supply curve will shift rightwards.
2. Taxes – If taxes increase, supply will reduce, and the supply curve will shift leftwards.
    - Impact of the increase in the cost of production and increase in taxes will be the same after the global financial crisis of 2008, the government reduced taxes to boost supply.
    - This shifted the supply curve rightwards.
3. Goals of Firms – Profit is not always the only goal of the firm
    - Goal may be sales maximization or social welfare
    - In this case, the supply increases, and the supply curve shifts rightwards
    - Supply may also increase due to good rainfall leading to increase in agri supply

Elasticity of Supply

"Responsiveness of the quantity supplied to the change in price"
If the change is steep => high elasticity
Elasticity (Es) = (% change in quantity supplied) / (% change in price)
If Es>1 => supply is elastic

If Es<1 => supply is inelastic Determinants of elasticity of supply
The overall determinant is choice – more the choice with the firm, higher the elasticity

E.g. Perishable quantities – the firm has no option/choice to store; have to sell at any price similarly for agricultural commodities – inelastic supply.

What is Market Equilibrium?

- Quantity demanded = quantity supply

Equilibrium point = point of intersection of demand and supply curves

- Ideal situation – both buyers and sellers derive maximum utility and satisfaction from this point
- Markets comprise of two groups – buyers and sellers

Buyers want lower prices to maximize their satisfaction.
Sellers want higher profits.

- Reducing the price below the equilibrium will lead to a shortage

The price will automatically go up, in the interest of both the groups.
Increasing the price of the equilibrium will lead to over-supply.
Suppliers will reduce the price in order to sell all the stock.

Consumer's equilibrium is the situation where a consumer spends his income on various commodities in such a manner that he gets maximum satisfaction

Producer's equilibrium is the situation where a firm produces that level of output which provides its maximum profits

Who fixes the price in the market – buyers, sellers, government or nobody?

It happens automatically through the **'market mechanism**'. Also called the **Price Mechanism** or the '**Invisible Hand**' (Adam Smith). Adam Smith is called the father of Economics (Book – An inquiry into nature and the causes of the wealth of nations, 1776). The wealth of nations is the first book on Economics, separating it from Philosophy. Though Kautilya's Arthshashtra dealt with Economics, it was primarily about statecraft.

Impact of Change in Demand & Supply

Change in Supply/Demand	Impact on Price	Example
When supply increases	Price decreases	More supply of agricultural produce in the mandis.
When demand increases	price increases	Price of fruits during Navratra

Why are the prices of agricultural commodities volatile?

1. Because of the inelasticity of demand & supply.
    1. You don’t start eating more just because the price is less.
    2. Producers anyway have to sell off their agri products at any price (perishable goods) Paradox of poverty of farmers.
    3. If crops fail, farmers have nothing to sell and the farmers lose income.
    4. But even when there are bumper crops, their income reduces!
    5. Farmers lose in both cases.

Why do producers prefer to burn or sink the bumper crops, rather than sell?
Because if they export all, the supply will increase, the price will come down, bringing down overall income

Justification of Minimum Support Price by the government

- If the govt. doesn’t intervene, both farmers and consumers will lose
- With govt willing to buy ALL quantity at an attractive price (MSP), the farmers won’t be incurring losses
- It will reduce the fluctuation in prices, even in the case of overproduction, However, MSP is announced only for important crops (24 in number)
- If govt will announce MSP for all (even potato, tomato etc), it will have to buy unlimited quantity of all these
- Not enough storage for all the crops
- Only those crops which are crucial to food security are supported by MSP Difference between MSP & Procurement Price
- MSP = Guarantee to buy unlimited quantity at this price for selected crops
- Procurement Price = Guarantee to buy only limited quantity for distribution in PDS & buffer storage
- MSP = Usually below the market price (though not much below) Procurement Price = At or above the market price
- MSP Objective = Protect the interest of farmers in case of overproduction
- Procurement Price Objective = Protect the interest of both, the consumers (through PDS)& farmers
- MSP announced before sowing Procurement Price announced after harvest