SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)

ELASTICITY OF DEMAND

What We'll Discuss

TOPIC OUTLINE

What is Elasticity of Demand
Relative Elastic & Inelastic demands
Types of Elasticity of Demand
Significance

Elasticity of demand

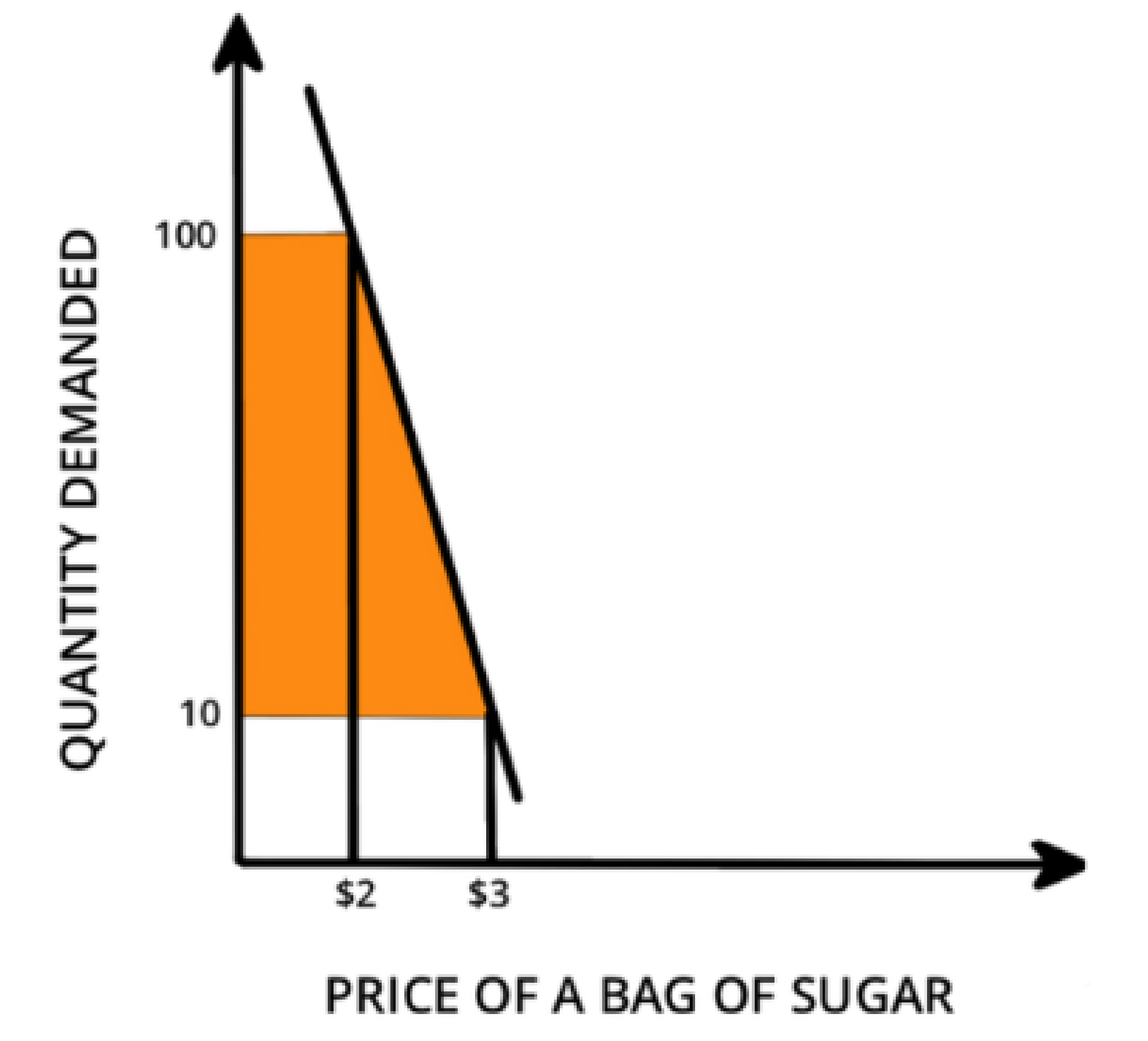
- … is a measure of how much buyers and sellers respond to changes in market conditions
- … allows us to analyze supply and demand with greater precision.

Example for Elasticity of Demand

- You might see salt and a variety of salt alternatives when you browse the aisle at the grocery store. Would you be willing to pay an extra 2Rsfor a bag of salt if there were salt replacements instead if the price of salt increased by 2Rs per bag tomorrow?
- Most people would switch from preferring salt to one that contains sugar substitutes, which would lower their demand for pure salt. Since most economists concur, salt is viewed as a good with a high degree of elasticity.

Relatively Elastic Demand

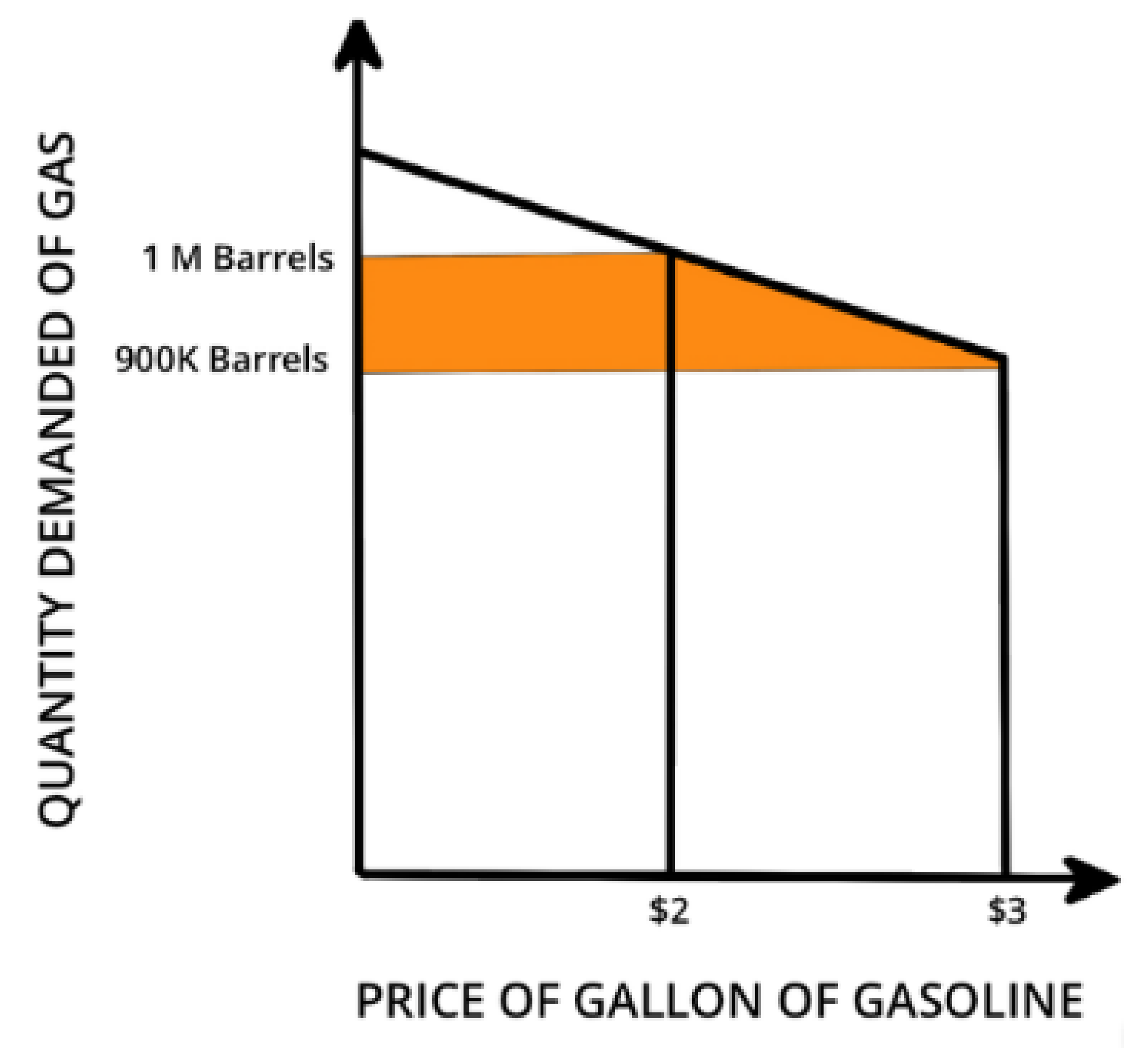
- Demand that is relatively elastic suggests that a change in the price of a good or service will have an effect on the quantity required of that good or service.
- A product or service is typically said to have significant price elasticity when there are several replacements available.



Relatively Elastic demand

Relatively Inelastic Demand

- Petrol is one product whose price is thought to be relatively inelastic. Despite the march toward alternative fuels, there are still a lot of individuals who depend on petrol for everyday needs and are unable or unlikely to switch to alternative fuels as a workable replacement.
- Even the price of Petrol increases still there is a demand for the Petrol



Relatively Inelastic Demand

Types of Elasticity of Demand

- Elasticity of demand is classified into three types based on the many elements that influence the quantity desired for a product:

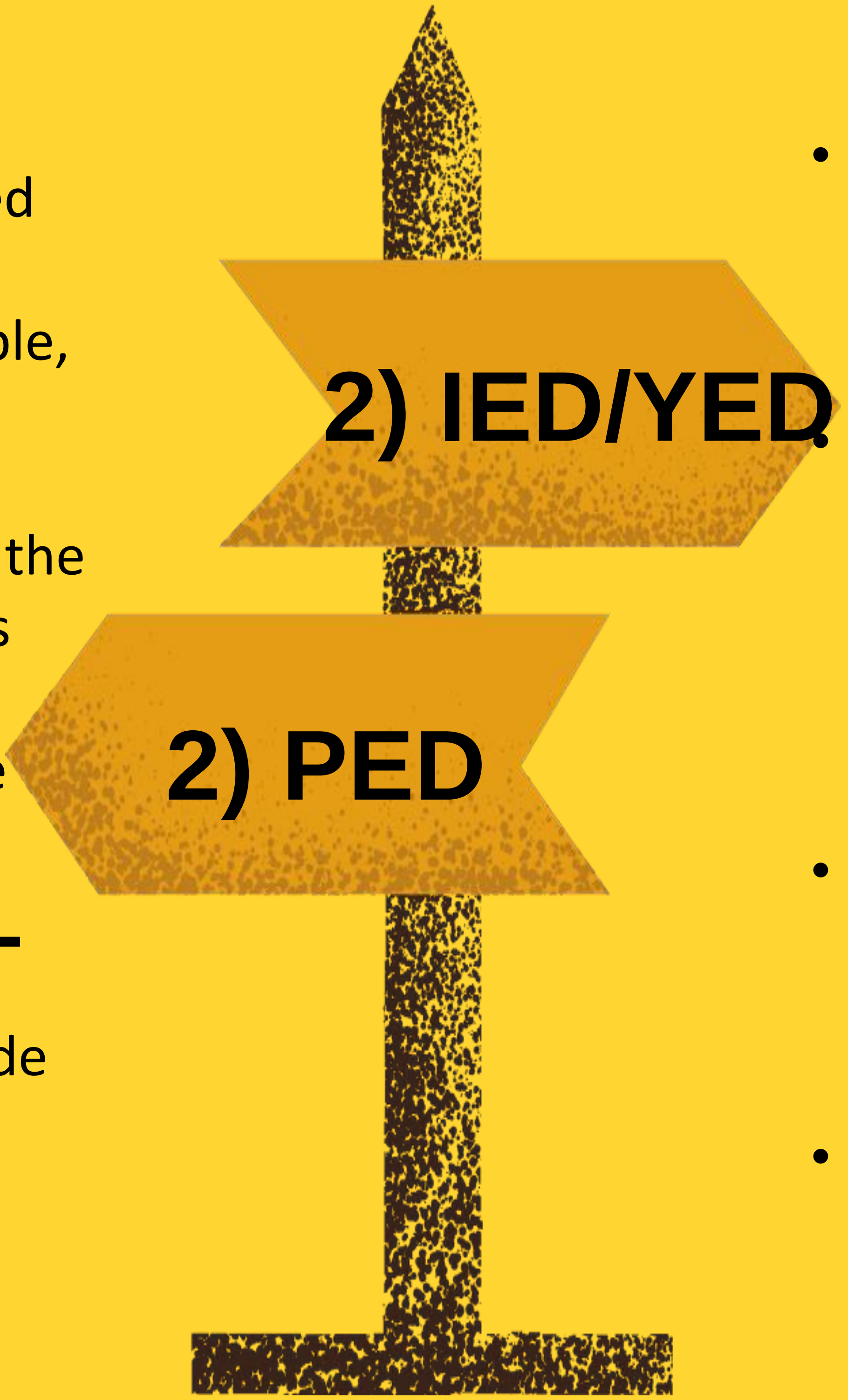
1. Price elasticity of demand (PED)
2. Cross elasticity of demand (XED)
3. Income elasticity of demand (IED or YED)

Cont…

- The quantity requested for a product is affected by any change in the price of a commodity, whether it be a drop or an increase. For example, as the price of ceiling fans rises, the quantity requested decreases.
- The Price Elasticity of Demand is a measure of the responsiveness of quantity sought when prices vary (PED).
- The mathematical formula for calculating Price Elasticity of Demand is as follows:

$$\textbf{PED} = \frac{\textbf{\%Change in Quantity Demanded \%}}{\textbf{Change in Price.}}$$

- The formula's output determines the magnitude of the influence of a price adjustment on the amount required for a commodity.



- Consumer income levels have a significant impact on the amount requested for a product. This may be seen in the contrast between commodities sold in rural marketplaces and those sold in urban markets.
- The Income Elasticity of Demand, commonly known as YED, refers to the sensitivity of the quantity requested for a certain commodity to changes in real income (the income generated by a person after accounting for inflation) of the consumers who buy this good, while all other variables remain constant.
- The formula for calculating the Income Elasticity of Demand is as follows:

$$\textbf{YED} = \frac{\textbf{\% Change in Quantity Demanded\%}}{\textbf{Change in Income}}$$

- The formula's output may be used to assess if a product is a need or a luxury item.

Cont…

3) CED

- In an oligopolistic market, numerous companies compete. Thus, the amount desired for a commodity is affected not only by its own price, but also by the prices of other items.
- Cross Elasticity of Demand (XED) is an economic term that assesses the sensitivity of quantity requested of one good (X) when the price of another item (Y) changes, and is also known as Cross-Price Elasticity of Demand.
- The formula for calculating the Cross Elasticity of Demand is as follows:

$$\textbf{XED} = \frac{\textbf{(\% Change in Quantity Demanded for one good (X)\%)}}{\textbf{(Change in Price of another Good (Y))}}$$

- The result for a substitute good would always be positive since anytime the price of an item rises, so does the demand for its alternative. In the case of a complementary good, however, the outcome will be negative.

FACTORS OF DETERMINING ELASTICITY

1

NATURE OF COMMODITY

By Nature commodities are classified as necessaries, comforts and luxuries. Normally Demand for necessaries like food grains are relatively Inelastic and for comforts and luxuries like diamond, perfumes, etc is relatively Elastic.

2

AVAILABILITY OF SUBSTITUTES

The larger the number of substitutes available for a commodity, the greater would be the elasticity. Demand for products like soap, soft drinks, detergents, tooth paste, etc. have many substitute so demand is elastic. However, salt, garlic, onions have no substitute so demand is inelastic.

3

USES OF COMMODITY

Single use commodities have less elastic demand and multi-use goods like coal, electricity, sugar, etc. have relatively elastic demand.

4

DURABILITY OF THE COMMODITY

The demand for durable goods like T.V., car, fridge, etc is relatively inelastic in the short run and elastic in the long run. Whereas the demand for perishable goods is relatively inelastic.

Cont…

5 RANGE OF PRICE

The demand for commodities which are highly prices and will have a inelastic demand like AC, Car, etc. Even very low prices goods have inelastic demand.

6 CONSUMER'S INCOME

Generally if income is very high, the demand for over all commodities tends to be relatively inelastic. The demand pattern of the rich people is rarely affected even when there is significant price change.

7 INFLUENCE OF HABITS & CUSTOMS

When a person is habituated to consumer a certain commodity, the demand will be inelastic for e.g. demand for cigarettes to a chain smoker is inelastic.

8 TIME PERIOD

The demand for goods is less elastic in the short period and more elastic in the long period. This is because (1) in the long period consumer are better informed about their price (2) habits of consumer's change in the long run (3) durable goods get worn out in the long period.

Cont…

9

PROPORTION OF INCOME SPEND

If consumer spends a very small proportion of his income on a commodity, the demand for it will be relatively inelastic and vice-versa of eg. demand of salt, newspaper, pins are inelastic.

10

URGENCY & POSTPONEMENT

If the demand for a commodity is urgent then demand for it will be inelastic. Eg. demand for medicine for a patient. Whereas, if the demand for a commodity can be postponed it will have elastic demand.

11

COMPLEMENTARY GOODS

Complementary goods are those goods which are demanded jointly such as car and petrol, mobile and sim cards etc. Demand for petrol will be inelastic as car cannot run without petrol.

SIGNIFICANCE OF ELASTICITY OF DEMAND

- Helps businesses fix the price of their products. Helps in maximizing profits.
- Helps in pricing a substitute. Businesses can learn how to allocate the cost of production when they know the price elasticity of demand.

THANK YOU