

CHAPTER 3
DEMAND AND SUPPLY

• Demand

1. What is the law of demand and how do we illustrate it?

The law of demand states:

- Other factors being constant (ceteris paribus), price and quantity demand of any good and service are **inversely related** to each other.
 - The higher the price of a good, the smaller is the quantity demanded;
 - The lower the price of a good, the greater is the quantity demanded.”

The law of demand is illustrated by:

- A **downward-sloping demand curve** drawn with the quantity demanded on the horizontal axis and the price on the vertical axis
- **The slope is negative** to show the negative relation between **P & Qd**

2. What are the causes of a Change in the Quantity demanded (the causes of the law of demand)?

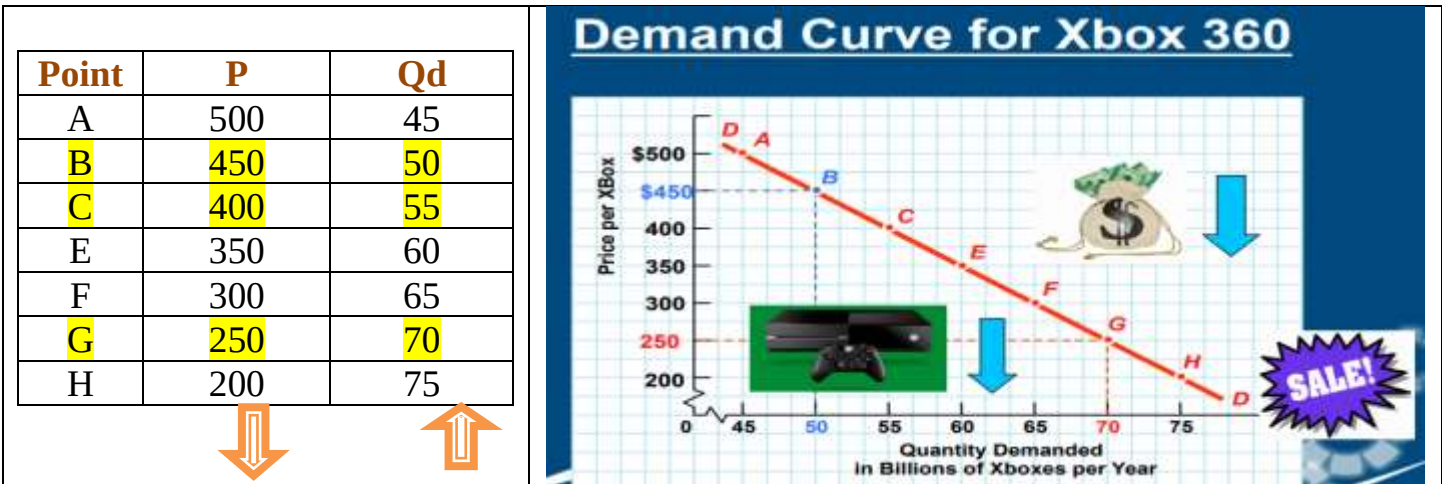
- **The Price of the good** is the only one factor that affects **Quantity demanded** $\Delta P \rightarrow \Delta Q_d$

Change the Price of the good → Change in quantity demanded → Movement along the demand curve

- $P \downarrow \rightarrow Q_d \uparrow \rightarrow$ Move down along demand curve
- $P \uparrow \rightarrow Q_d \downarrow \rightarrow$ Move up along demand curve

Ex:

- ❖ “Other things remaining the same, during Sale, **price of Xbox360 decreases**, People will buy more and more Xbox360, so the quantity demanded of Xbox360 Increases as price Decreases.
 - We will move down along demand curve from point C (400 dollars, 55units) → G (250 dollars, 70units)
- ❖ “Other things remaining the same, if price of Xbox360 increases, People will buy less and less Xbox360, so the quantity demanded of Xbox360 decreases as price increases.
 - We will move Up along demand curve from point C (400 dollars, 55units) → B (450 dollars, 50 units)



➤ The Price of the good affects Quantity demanded through Effects:

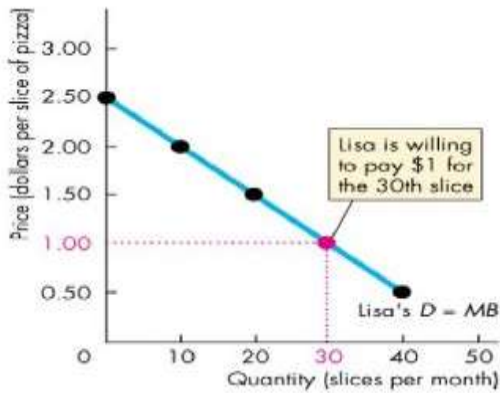
1) Substitution effect	2) Income effect
The portion of a change in quantity demanded that is due to a change in the relative price of the good • If the price of meat increases, • then the higher price may encourage consumers to switch to alternative food sources, such as buying vegetables. P_{meat}↑ Q_{d.meat}↓ Q_{d.vegetables}↑	The portion of a change in quantity demanded caused by a change in a consumer’s income when the price of a product changes • If the price of meat increases, • it means that after buying some meat, they will have lower spare income • Therefore, consumers will buy less meat because of this income effect. P_{meat} ↑ Income ↓ Q_{d.meat} ↓

3. What does the demand curve tell us about the price that consumers are willing to pay?

A demand curve is a willingness-and-ability-to-pay curve:

The price indicates consumer's Willingness to pay which is equal to that consumer's Marginal Benefit (MB). **(WTP = P = MB)**

- For any fixed quantity of a good available, the smaller the quantity available, the higher is the price that someone is willing to pay for another unit,
- Ex :



If available quantity of pizza 30 slices, Lisa is **WTP = MB = P = 1**
If available quantity f pizza decreases to 10 slices, Lisa is **WTP =MB=P= 2**

4. List all the factors that lead to change Demand curve, and for each influence, say whether it increases or decreases demand.

At given price level, the Main factors that change demand are:

- **P**rices of other goods (substitute **(+)** or complementary **(-)**)
- **O**utlook (Expected future prices **(+)** - Expected future income and credit **(+)**)
- **I**ncome (Normal good **(+)**, inferior good **(-)**)
- **N**umber of potential customers (Population) **(+)**
- **T**aste (Preferences)for a good **(+)** / against the good **(-)**



1) Prices of other goods:

Basis	Substitute Goods	Complementary Goods
Meaning	Substitute goods refer to those goods which can be used in place of one another to satisfy a particular want.	Complementary goods refer to those goods which are used together to satisfy a particular want.
Nature of Demand	Substitute goods have competitive demand .	Complementary goods have joint demand .
Relation	Price of one substitute good has positive relationship with quantity demanded of another substitute good.	Price of a complementary good has negative relationship with quantity demanded of another complementary good.
Examples	(1) Tea and Coffee (ii) Coke and Pepsi.	(i) Tea and sugar (ii) Car and Petrol.

P. coffee ↑ → **Qd. coffee** ↓ → **D. tea** ↑

- A rise in the price of a substitute(coffee),
- increases the demand for Tea
- The demand curve for tea **shifts rightward**, and vice versa

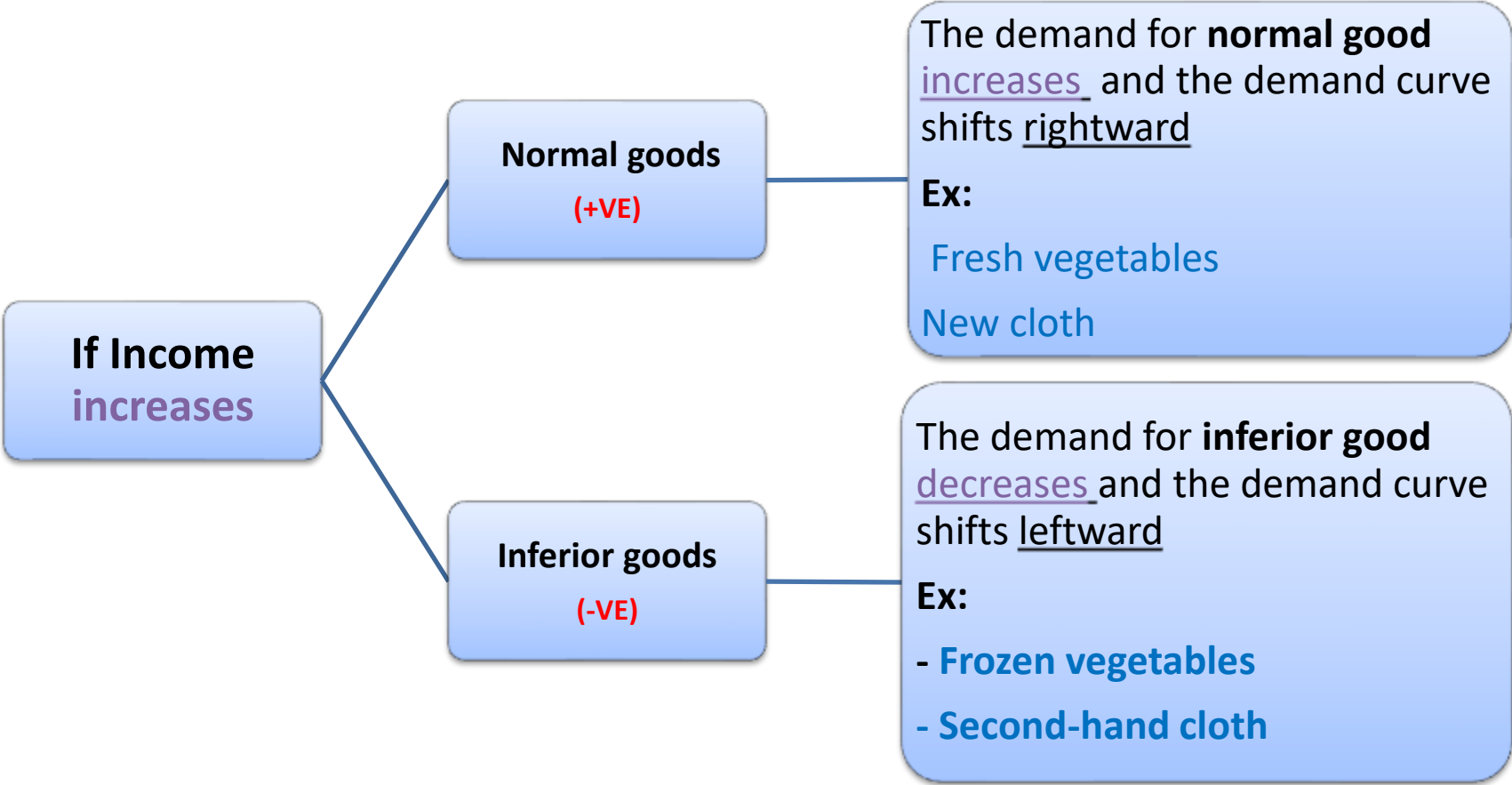
P. sugar ↑ → **Qd. sugar** ↓ → **D. tea** ↓

- A rise in the price of a complement (sugar),
- decreases the demand for Tea
- The demand curve for tea **shifts leftward**, and vice versa

2) Outlook:

- **Expected future prices of the good (+VE)**
 - If the expected future price of a good rises, current demand for the good increases and the demand curve shifts rightward, and vice versa
 - لو انا متوقع ان سعر العربية هيغلي كمان سنة , فبالتالى هروح مشترىها دلوقتي قبل ما تغلي فبكدة توقع زياد السعر فى المستقبل ادى الى زيادة الطلب على العربية دلوقتي
- **Expected future income and credit. (+VE)**
 - When expected future income increases or when credit is easy to obtain, the demand might increase now and the demand curve shifts rightward, and vice versa

3) Income:



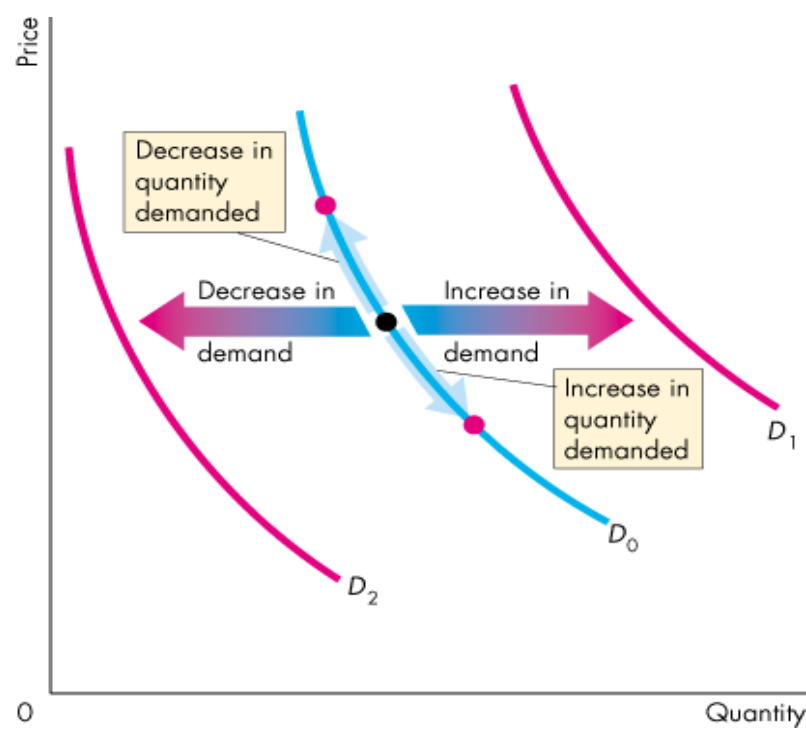
3) Number of potential customers (Population) (+VE)

- An increase in population → increases the demand for all goods→ and the demand curve shifts rightward, and vice versa

4) Tastes (People’s preferences)

- If people’s preferences **for** a good rise→ the demand increases → and the demand curve shifts rightward, and vice versa (+VE)

- If people’s preferences **against** a good rise→ the demand decreases → and the demand curve shifts leftward, and vice versa **(-VE)**



5. Why does demand not change when the price of good changes with no change in the other influences on buying plans?

- Because price does not influence or lead to shift in Demand curve, price is the only factor that leads to change the Quantity demanded and cause a movement along demand curve

Change Quantity demanded	Change Demand curve
○ Other factors constant, as the price change, Quantity demanded will change at opposite direction ○ Movement along demand curve	When price is constant, as the other influences on buying plans change, Demand will change Shift demand curve at given price level.