Introduction to Microeconomics I
ECO201/LAG-PRM211

Lesson No.2: Consumer Behaviour I

Week No. 2 (December 08, 2025)

Recap of Week 1

- What is Microeconomics?
- Nature of Microeconomics
- Relevance of studying Microeconomics
- Scope of Microeconomics
- Basic concepts in Microeconomics

TASK NO. 1

- School fees
- Laptop
- iPhone
- Hostel fees
- New wares
- New shoes



CONSUMER BEHAVIOUR I

By the end of the Learning Session, you should be able to:

Explain	the Traditional Theory of Demand
Describe	the concept of consumer behaviour
List	the assumptions of Cardinal Utility Theory
Explain	the basic concept of utility
Describe	how consumers maximize utility
Derive	the demand curve

Traditional Demand Theory

- $\boldsymbol{Demand} = f(X_1, , X_2, , X_3, , Y_i, , T_i, W_i, Cr_i, \ D_{t-1}, \ Y_{t-1})$

  - $X_1 = Own\ Price$
  - $X_2 = Consumer's\ income$
  - $X_3 = Price\ of\ other\ commodities$
  - $Y_i = Consumer's\ income$
  - $T_i = \ Consumer's\ taste$
  - $W_i = Consumer's\ wealth$
  - $Cr_i = Credit\ availability$
  - $D_{t-1} = Past\ levels\ of\ demand$
  - $Y_{t-1} = Past\ levels\ of\ income$

Traditional Theory of Demand (ctd)

- **Starts** with the examination of consumer behaviour
- **Concentrates** mainly on five determinants: $(X_1, X_2, X_3, T_i \; and \; Y_i)$
- **Focuses** only on the final consumers' demand
- **Examines** demand in only one market
- **Neglects** demand for investment goods

Theory of Consumer Behaviour



Consumers are *rational*

Consumers have *full knowledge* of:

- Available commodities
- Their prices
- His/her income

This refers to the axiom of utility maximization



Approaches to Studying Consumer Behaviour

- Two, namely
  - **The Cardinal Approach**
  - The Ordinal Approach

Assumptions of the Cardinalist Utility Theory

- **Assumption of rationality** – *as consumers, you know what you want*.
- **Cardinality** – *as consumers, you can measure your utility (i.e., in utils)*
- **Constant marginal utility of money** – *each additional ₦1 will give you the same level of satisfaction*
- **Diminishing marginal utility** - *the more you have, the less you value an extra unit*.

The Concept of Utility

- Utility
- Total Utility (TU)
- Marginal Utility (MU)
- Law of Diminishing Marginal Utility (LDMU)

What is Utility?



The **degree of satisfaction** you derive from the consumption of a good/service



The **want-satisfying power** of a good/service.



The **satisfaction, happiness, or benefit** a person gets from consuming a good or service.



The **value/experience** a consumer derives from a product/service.

Marginal Utility

Marginal Utility (MU) $= \frac{\Delta TU}{\Delta X}$

- **Marginal** means "***extra***."
- **Marginal Utility (MU)** means "*extra utility obtained by consuming an additional unit of any item.*
- $\Delta TU = change\ in\ total\ utility$
- $\Delta X = chnage\ in\ the\ number\ of\ a\ commodity\ consumed$

Law of Diminishing Marginal Utility (LDMU)

Definition:

- Holding your taste constant, … the LDMU states that as your consumption of any commodity increases, the additional consumption yields a declining utility.

- The more you consume, the less satisfaction you get from each additional unit.

Conditions for the Law to Hold

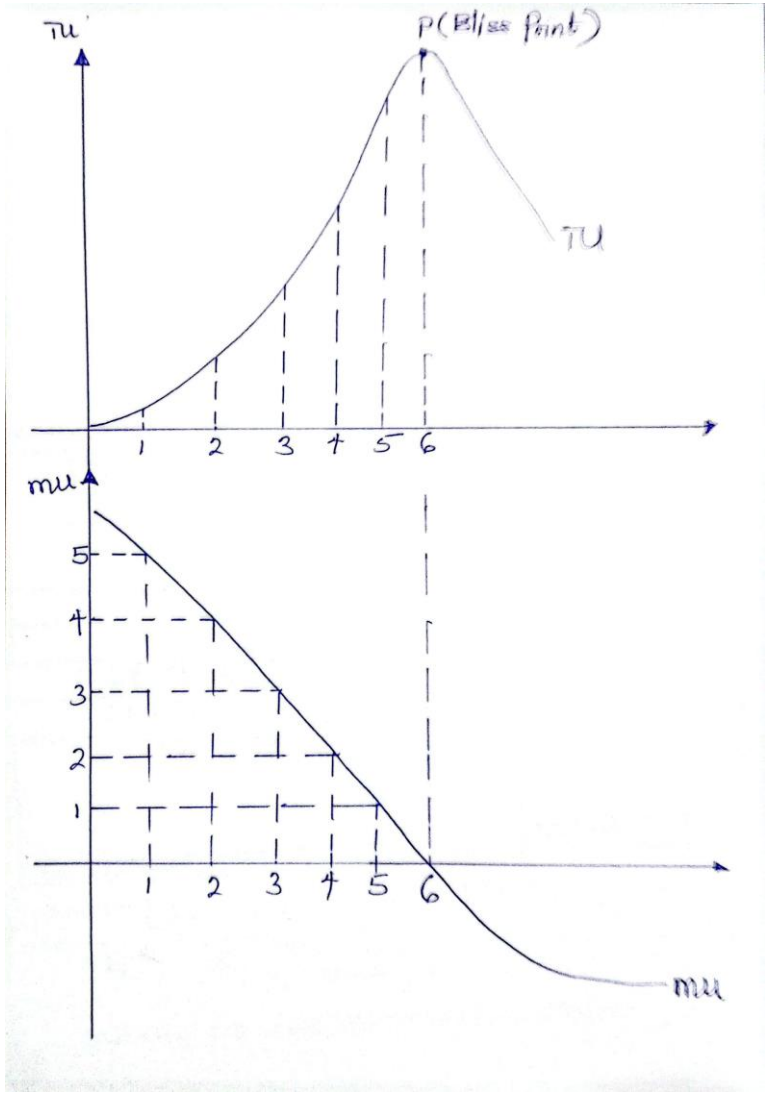
- Consumers must be rational
- Units consumed must be identical
- Consumption must occur continuously
- No significant time gap between consumption of units

Hypothetical Table of Utility

Qty (X)	Total Utility (TU)	∇X	ΔTU	MU = $\frac{\Delta TU}{\Delta X}$
0	20	-	-	-
1	25	1	5	5
2	29	1	4	4
3	32	1	3	3
4	34	1	2	2
5	35	1	1	1
6	35	1	0	0
7	34	1	-1	-1
8	32	1	-2	-2
9	29	1	-3	-3

Graphical Illustration

- Total Utility increases at a diminishing rate because Marginal Utility is falling.
- Total Utility peaks when Marginal Utility is zero.
- Total Utility declines when Marginal Utility becomes negative.
- The point P (Bliss Point) shows the highest satisfaction level before negative utility sets in.



Equilibrium of the Consumer

Assumptions

- Consumes only two products – product X and product Y
- Market prices of both products are given - $P_x \; and \; P_y$
- Consumer spends all his/her disposable income on both products

Equilibrium

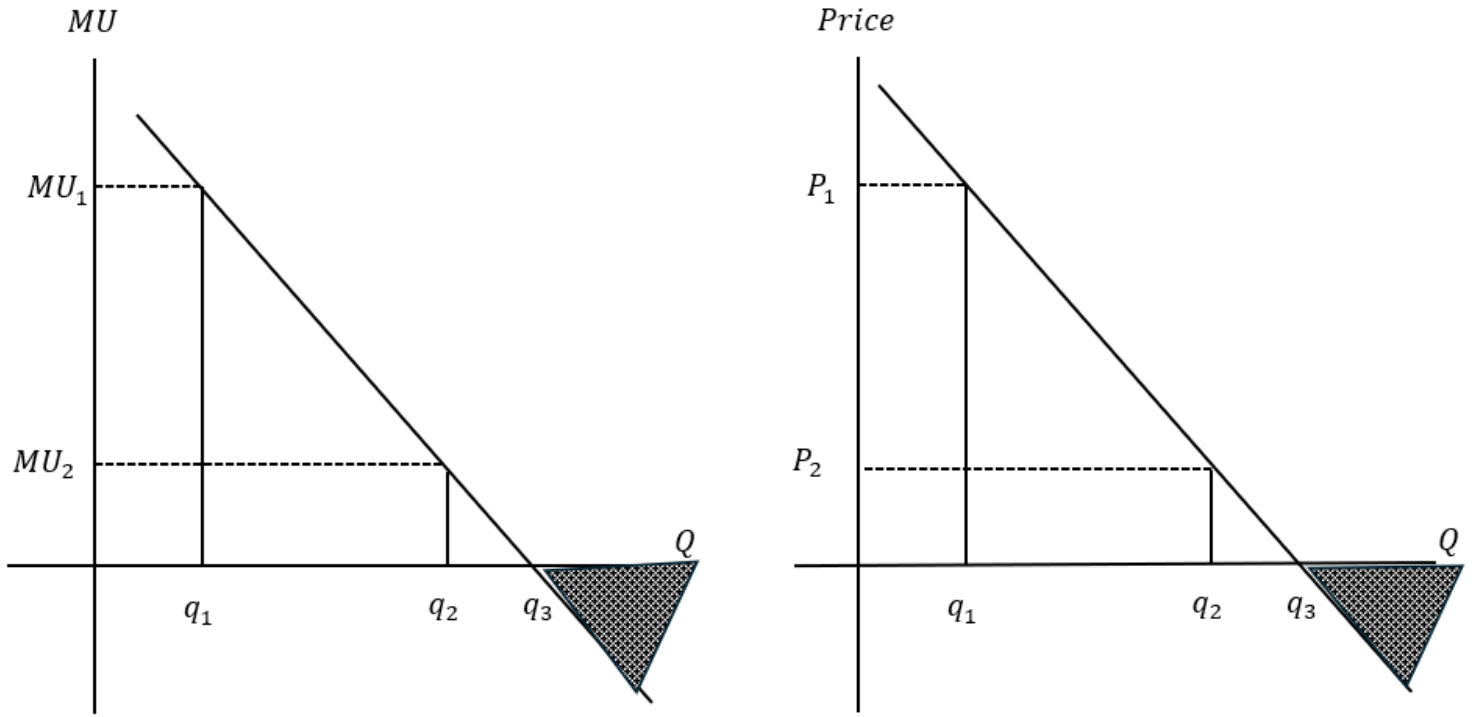
- *Allocations must be made in such a way that the marginal utility derived from each commodity is proportional to price.*
- $\frac{MU_X}{P_X} = \frac{MU_Y}{P_Y}$

If Equality is NOT Fulfilled?

— $\frac{MU_x}{P_x} > \frac{MU_y}{P_y}$ What should this consumer do to attain equilibrium?

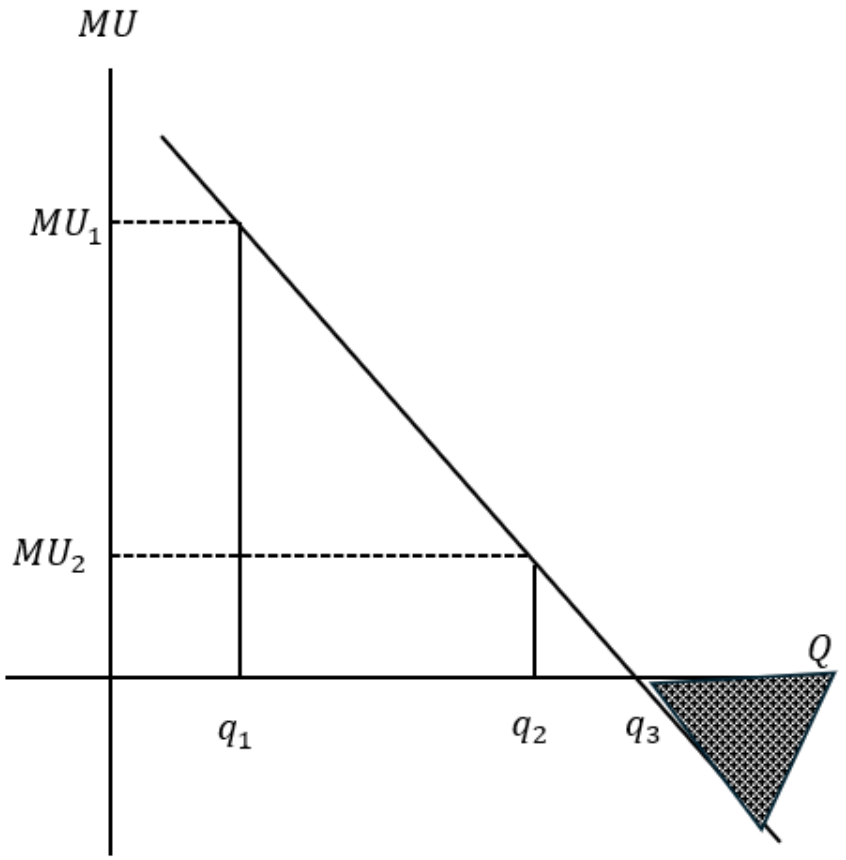
- The consumer should consume more of the commodity *x & consume less of commodity y*
- MU_x will be reduced and MU_y will be raised.
- This is guaranteed by LDMU
- The adjustment process will continue until equilibrium is restored.

Derivation of Demand



The **demand curve** is derived from the **marginal utility curve** by measuring MU in money terms (price). As MU falls with each additional unit, the price consumers are willing to pay also falls, producing a downward-sloping demand curve.

Marginal Utility Curve



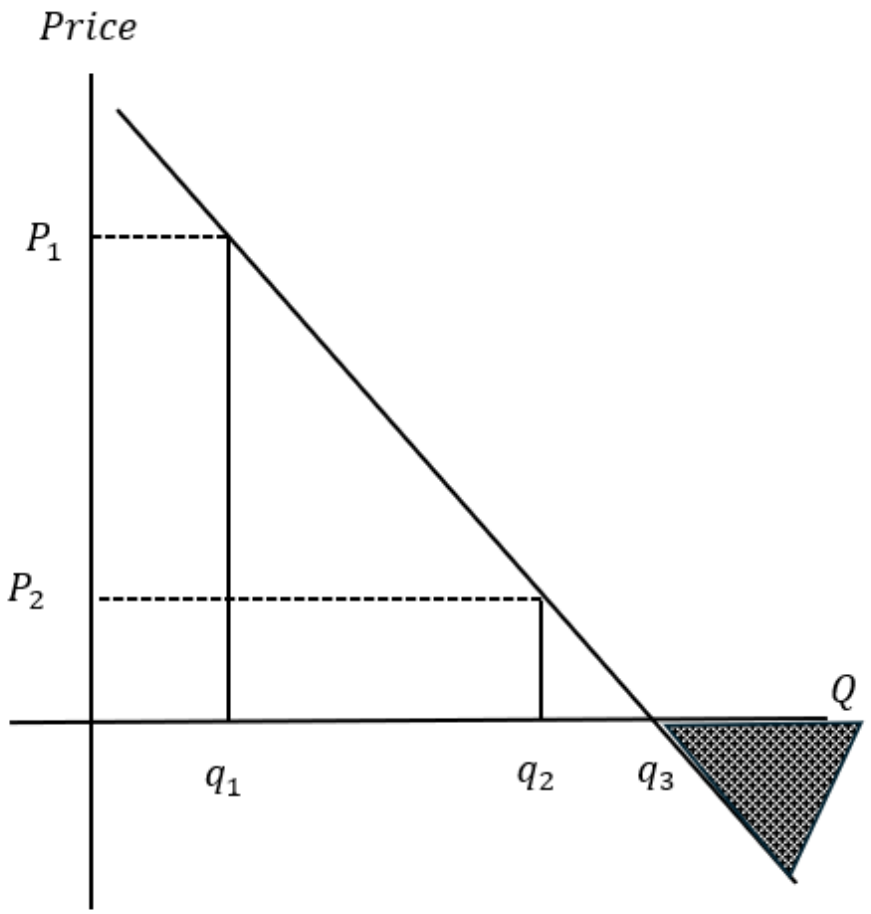
Interpretation:

This describes how much the consumer values *each additional unit*.

- The **first unit** gives a lot of satisfaction → high MU.
- The **second unit** gives less → lower MU.
- The **third unit** gives even less.

This fall in MU as consumption increases forms the basis for a downward-sloping demand curve.

Demand Curve Derived



Since marginal utility falls with additional consumption:

$$MU_1 > MU_2 > MU_3 > \dots$$

And because consumers only buy an extra unit if price ≤ MU:

$$P_1 > P_2 > P_3 > \dots$$

This gives a **downward-sloping demand curve**.

In both graphs, the shaded area below MU (or demand) and above the price line represents:

Consumer surplus

The difference between:

- What the consumer is willing to pay (MU or demand curve), and
- What the consumer actually pays.

This reinforces that **demand comes directly from MU**.