CONSUMER BEHAVIOUR

[Cardinal Approach]

Utility

- Utility of a commodity is its want-satisfying capacity
- Utility is measured in Utils
- Utility is subjective. Different individuals can get different levels of utility from the same commodity
- Utility that one individual gets from the commodity can change with change in place and time
- Utility is a scientific construct that economists use to understand how rational consumer divide their limited resources among the commodities that provide them with satisfaction.
- Utility is independent and additive.

Approaches to Utility Analysis

1. Cardinal Utility Analysis (given by Alfred Marshall): Cardinal utility analysis assumes that level of utility can be expressed in numbers.

2. Ordinal Utility Analysis (given by Hicks and Slutsky): In real life, we never express utility in the form of numbers. At the most, we can rank various alternative combinations in terms of having more or less utility.

Cardinal Utility Analysis

https://www.economicsdiscussion.net/cardinal-utility-analysis/consumers-behaviour-cardinal-utility-analysis-explained-with-diagram/1111

- Measures of Utility
- Utility is measured in terms of Utils
- **Total Utility**: Total utility of a fixed quantity of a commodity (TU) is the total satisfaction derived from consuming the given amount of some commodity *x.*

- **Marginal Utility**: Marginal utility (MU) is the change in total utility due to consumption of one additional unit of a commodity

  MU*n = TUn – TUn-1*

Assumptions of Cardinal Approach

- Consumer is rational i.e. wants to maximise his wants based on his budget constraints
- Utility is measured in terms of utils
- Marginal utility of money is constant
- Law of diminishing marginal utility is applied
- Total utility depends on quantity of various goods

Law of Diminishing Marginal Utility

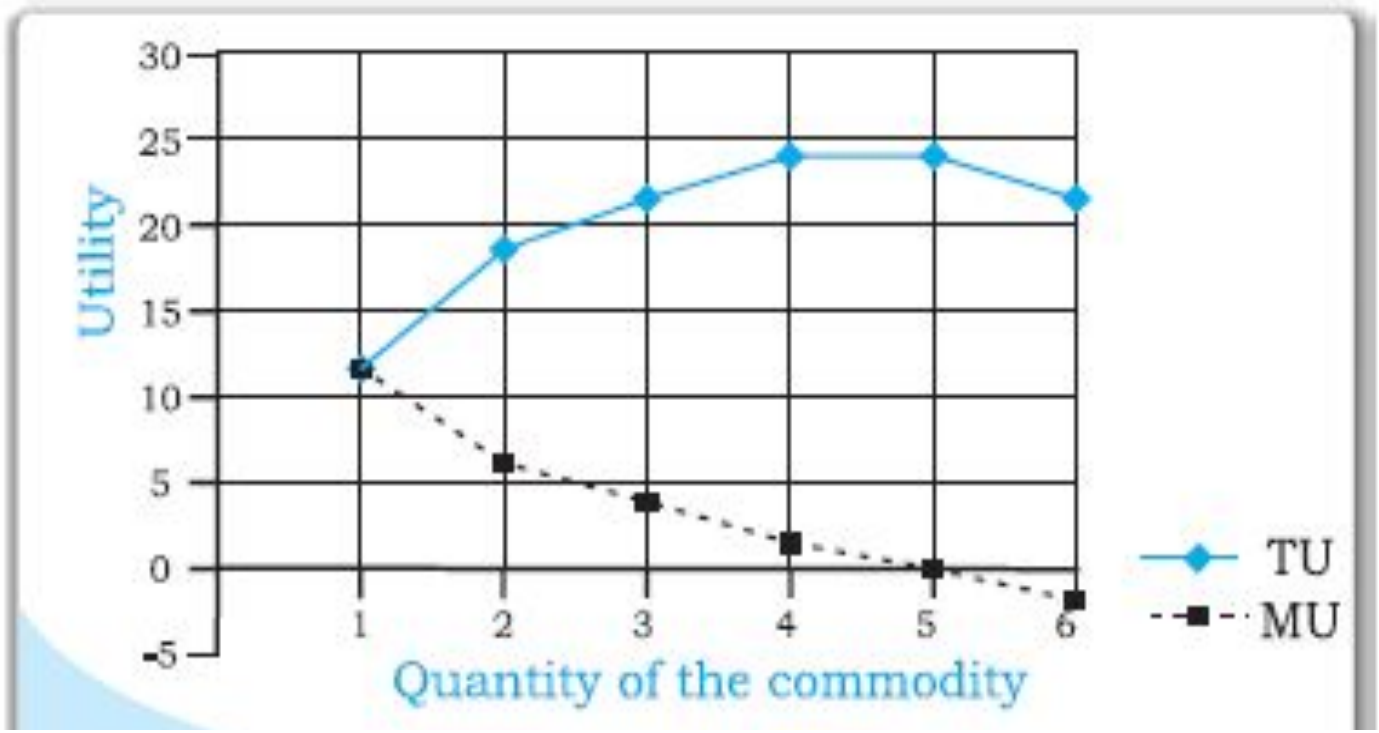
- It states that marginal utility from consuming each additional unit of a commodity declines as its consumption increases, while keeping consumption of other commodities constant.

  - Assumptions of diminishing marginal utility
    1. Only standard units of the commodity are consumed like a cup of tea and not a spoon of tea.
    2. Consumption of a commodity is continuous

Values of marginal and total utility derived from consumption of various amounts of a commodity

Units	Total Utility	Marginal Utility
1	12	12
2	18	6
3	22	4
4	24	2
5	24	0
6	22	-2

Values of marginal and total utility derived from consumption of various amounts of a commodity



Consumer's equilibrium in Cardinal Approach

Utility Maximizing Rule: The Law of Equi-marginal Utility:

- One commodity Case:

$$MUx = Px$$

- n-commodity Case:

In general, utility-maximizing consumers spread out their expenditures until the following condition holds:

$$\text{utility-maximizing rule: } \frac{MU_X}{P_X} = \frac{MU_Y}{P_Y} \text{ for all goods,}$$

where MU_X is the marginal utility derived from the last unit of X consumed, MU_Y is the marginal utility derived from the last unit of Y consumed, P_X is the price per unit of X, and P_Y is the price per unit of Y.

It is the fundamental condition to maximum satisfaction. It states that a consumer having a fixed income and facing given market prices of goods will achieve maximum satisfaction or utility when the marginal utility of the last dollar spent on each good is exactly the same as the marginal utility of the last rupee spent on any other good.

Thank you!