UTILITY ANALYSIS

SOMA SAHA

THEORY OF CONSUMER BEHAVIOUR

- Theory of demand starts with individual consumer

- Market demand derived from individual demand (Micro, not Macro concept)

- What is market?

- Assumptions:

  Rational Consumer

  Axiom of Utility Maximisation

  Complete Information (all available commodities, prices,   income)

- Thus, comparison of utilities from different baskets or bundles

- Two approaches: Cardinalist and Ordinalist

CARDINAL AND ORDINAL UTILITY

- **Cardinal Utility: subjective, measurable**
    - Gossen (1854), Jevons (1871), Walras (1874), Marshall (1890)
    - Monetary units or 'utils'

- **Ordinal Utility: cannot be 'measured', but can be ordered**
    - Ordinal magnitude
    - Suffices for a consumer to 'rank' bundles
    - Doesn't matter whether (30, 40) or (300000, 400000)
    - Order of preference
    - IC and RP

CARDINAL UTILITY THEORY

- **Assumptions**

  Rationality

  Cardinal Utility (money or utils)

  Constant MU of money (justifiable?) : standard cannot be subjective, measuring rod cannot be elastic

  Axiom of Diminishing MU

  TU is U = f(x1, x2,…, xn) [additive in earlier versions]

TU AND MU

- **Rasogolla: 0,1,2,3,4,5,6,7**

- **TU: 0, 20, 35, 45, 50, 50, 45, 35**

- **MU: Satiation point**

- **Plot and see**

- **Relation between Total and Marginal**

- **Law of Diminishing MU (Graphical representation?)**

- **Gossen's First Law**

- **Limitations or Qualifications (ceteris paribus: tastes, prices; homogenous units; continuity; suitable size units ; rationality (lexicographic preference?); ordinary goods; divisibility (how to treat say coke and sofa set?); Constant MUM**

LDMU HELPS TO EXPLAIN

- **Variety in production and Consumption**

- **Value Theory (Supply>, price <)**

- **Diamond-Water Paradox**

- **Law of dd, Law of equimarginal Utility and notion of Consumers' Surplus follow suit**

EQUILIBRIUM OF THE CONSUMER

- **Single Commodity**
    - MUx=Px (Why?)
    - Trace path
    - U=f(x)
    - Expenditure= Px.x

- **Two Commodities:**
    - MUx/Px = Muy/Py (Why)
    - Trace path

- **Multiple Commodities**
    - MUx/Px = Muy/Py =…=MUn/Pn(Why)
    - Trace Path
    - Proportionality Rule, Law of Substitution, Law of Maximum Satisfaction, Law of indifference, law of equimarginal utility, Gossen's Second Law

DERIVATION OF DEMAND CURVE

- TU and MU Schedules

- Take the MU Schedule (x, MUx)

- Set MUx=Px

- Jhingan, p.131 Example

THANK YOU