Consumer's Surplus

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Introduction:

- The policy of Consumer's Surplus which inhabits an important place in the Marshallian System of Welfare Economic Analysis was originally stated by W. S. Jevons and French economist A. J. Dupuit in 1844 in a Basic form.

- Later on Dr. Alfred Marshall explained this concept in "The Pure Theory of Domestic Values" as consumer's rent.

- In his 'Principles of Economics' he further elaborated this concept in logical details and describe it as "Consumer's Surplus". He is called the Consumer's Surplus.

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- The difference between the maximum price consumers are willing to pay for a product and the actual price.

- The surplus, measurable in dollar terms, reflects the extra utility gained from paying a lower price than what is required to obtain the good.

- Consumer surplus can be measured by calculating the difference between the maximum willingness to pay and the actual price for each consumer, and then summing those differences.

- Consumer surplus is shown graphically as the area under the demand curve and above the equilibrium price.

- Consumer surplus and price are inversely related – all else equal, a higher price reduces consumer surplus.

Details of the Concept of Consumer Surplus:

- In actual life, when we buy a commodity for consumption, we gain some utility by consuming it, at the same time we lose some utility in terms of the price that we need to pay for it. In the beginning, utility gained is usually higher than the utility lost.

- This concept is used to explain the gap between total utility that a consumer gets from the consumption of a certain commodity and the total money value which he actually pays for the same. For example Suppose, a student goes to buy a note book. He is willing to pay ₹. 30 for the note book. But he gets the note book for ₹. 20. Thus, he has saved ₹. 10. This is called Consumer's Surplus.
- Consumer's Surplus = Possible Price - Actual Price

Definitions of Consumer’s Surplus:

- **Prof. Marshall** has said that “The excess of price which he (consumer) would be willing to pay rather than go without. The thing over that which he actually does pay, is the economic measure of this surplus satisfaction. It may be called “Consumer’s Surplus”.
- **According to Prof. J. K. Mehta** - “Consumer’s Surplus obtained by a person from a commodity is the difference between satisfaction which he derives from it and which he foregoes in order to procure that commodity.”
- **Prof. Samuelson** says that, “There is always a gap between total welfare and total economic value. This gap is the nature of a surplus which consumer gets because he always receives more than he pays.”

Assumptions of Consumer's Surplus:

1. Marginal Utility of Money is Constant:

The marginal utility of money to the consumer remains constant. It is so when the money spent on purchasing the commodity is only a small fraction of this total income.

2. No Close Substitutes Available:

The commodity in question has no close substitutes and if it does have any substitute, the same may be regarded as an identical commodity and thus only one demand should may be prepared.

3. Utility can be Measured:

The utility is capable of cardinal measurement through the measuring rod of money. Moreover, the utility obtainable from one good is absolutely independent of the utility from the other goods. No goods affect the utility that can be derived from the other goods.

4. Tastes and Incomes are Same:

That all people are of identical tastes, fashions and their incomes also are the same.

Explanation of the Law:

- **Consumer Surplus on Single Unit Purchase:** When a consumer purchases only one unit of a commodity even then the Consumer Surplus arises. Let us suppose a student is willing to pay ₹. 50 for a particular Pen and when he actually go to market and purchase it at ₹. 40. Thus ₹. 10 is the Consumer's Surplus.

- **Consumer's Surplus on a Multi-unit Commodity:** In our real life one purchases number of units of a particular commodity. The price that a consumer pays for all the different units of commodity actually measures the utilities of the marginal unit and he pays the same price for different commodities.

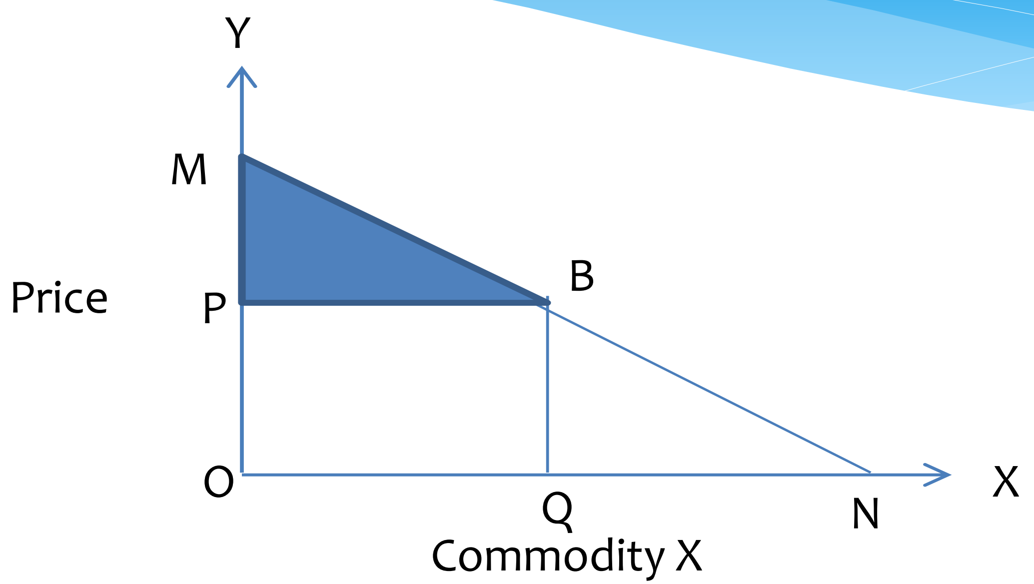
- The excess of utilities he derives from different commodities and the actual price paid is called as Consumer's Surplus.

Marginal Utility, Price and Consumer's Surplus Schedule

Units of 'X'	Marginal Utility (in ₹.)	Price (in ₹.)	Consumer Surplus (in ₹.)
1	10	2	8
2	8	2	6
3	6	2	4
4	4	2	2
5	2	2	0
6	0	2	-2

- The above table shows the various amounts of utilities he derives from the consumption of different units of X Commodities. From the first X commodity alone he derives marginal utility of ₹. 10 but the price which he pays is ₹. 2 and hence ₹. 8 is the Consumer's Surplus.
- Similarly, the Consumer's Surplus from 2nd, 3rd, 4th and 5th units are 6, 4, 2 and zero respectively. A rational consumer will consume only 5th commodity where the marginal utility is equal to its price and thereby maximizes his Consumer's Surplus. If he will consume the 6th unit he derive zero marginal utility where as he pays the price as ₹. 2. A rational consumer will not consume that commodity.

Diagrammatic Representation of Consumer Surplus



- In this diagram MN is a demand curve of a consumer OP is the market price. The price line is parallel to X axis because of perfect competition. At point B the marginal curve MN intersect the market price curve OP. Thus for OQ quantity the consumer derives utility as MOQB where as he pays POQB. Thus, triangular shaded area MPB is Consumer's Surplus.

Criticism of the Concept of Consumer's Surplus:

1. This Concept is Unreally
2. Measurement of this Concept is Difficult
3. This Concept is not Applicable to Substitutes
4. The Marginal Utility of Money never Remains Constant
5. Exhaustion of Surplus Utility
6. This Concept is not Applicable to Necessaries
7. The Complete list of Demand and Price not Available to Consumer

Thank You…!