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### SOME BASIC ASSUMPTIONS ABOUT PREFERENCES

One of the basic questions addressed in microeconomics is how a consumer with limited income takes decision about which good/service to buy. As discussed above, consumer behaviour has gained great relevance today and companies are spending huge amount to understand consumer preferences. Success of business has always been dependent on its understanding of consumer behaviour. But now since the world is more connected than ever through internet, consumers have large number of options. It has become imperative for companies to analyse consumer choices, preferences and design their goods/services accordingly.

Economists have identified three basic steps to understand consumer behaviour:

1) Consumer Preferences: First step is to identify consumer preferences. This can be done graphically or algebraically also. Behaviour is based on preferences i.e. likes, dislikes of the consumers. Thus, it is important to identify 'what gives value to the consumer'. We live in an information age and today. Companies follow their customers online, keep a track of sites they visit, products they buy etc. in order

to identify their preferences. Social networking sites have become popular data source to identify preferences.

- 2) Budget Constraints: This is next important aspect. Prices of goods and paying capacity of consumer has strong influence on his behaviour. Through online tracking, companies today are not only able to identify consumer preferences alone, but also their paying capacity and budget constraints. Additional discounts, cash back schemes, EMI options etc. are offered to the customer these days in order to ease their budget constraint.
- 3) Consumer choices: Final step to understand consumer behaviour is consumer choices. Given preferences and limited income, consumer chooses the combination of goods which maximise their satisfaction. With markets becoming global, consumers have large number of choices available these days. But final demand for a good will be dependent on combination of factors: their preferences, value offered by the product and budget constraint.

# **Assumptions about Consumer Preferences**

As discussed above, the theory of consumer behaviour is based on consumer preferences. For better understanding of consumer behaviour with the help of consumer preferences, economists usually make following assumptions about consumer preferences:

Completeness: Preferences are assumed to be complete i.e. any two different bundles of goods can be compared. A consumer either prefers one basket over other or is indifferent between two baskets.

Mathematically, 
$$(a1, a2) >= (b1,b2)$$
 or  $(a1, a2) <= (b1,b2)$   
Both

*Transitivity:* Transitivity means that if a consumer prefers X over Y and Y over Z then the consumer also prefers X over Z. Transitivity is a necessary assumption to ensure consumer consistency.

More is always preferred over less: Consumer is rational and knows that greater utility can be derived by consuming more quantity of a commodity. Thus, he always prefers more quantity over less.

#### CARDINAL UTILITY ANALYSIS

Cardinal utility Analysis was mainly given by neoclassical economists like Jevons, Dupuit, Menger, Walras and Pigou etc. The exponents of this approach regards utility as cardinal concept. In other words, they hold that utility is a measurable and quantifiable entity. For example, According to cardinal utility approach, if a person is drinking a glass of water, it will be possible for him to assign some numerical value say 10 utils or 20 utils to the utility derived from it.

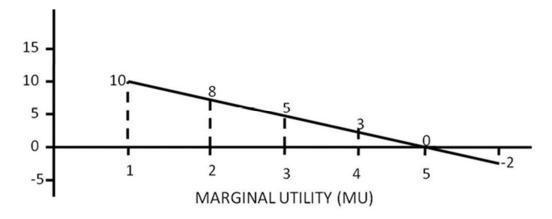
This approach is based on following assumptions:

- 1) The cardinal measurement of utility- Utility of any commodity can be measured in units called 'utils'.
- 2) Utilities are additive i.e. total utility can be calculated by measuring utility derived from all the units of a commodity consumed.
- 3) Utility is independent i.e. not related to the amounts of other commodities purchased by the consumer. Further, it is also assumed that it is not affected by utilities of other individuals.
- 4) Marginal utility of money remains constant: When a person purchases more of a good, the amount of money diminishes and marginal utility of remaining money may increase. But in this approach, marginal utility of money is treated constant. This assumption is important as cardinalists have used money as a measure of utility and it is necessary to keep the measuring rod of utility as fixed.

#### LAW OF DIMINISHING MARGINAL UTILITY

Law of Diminishing Marginal Utility is one of the most fundamental law of utility analysis. It explains the relationship between utility and quantity of a commodity. This law states that after sufficient quantity of a commodity is consumed, the utility derived from each successive unit decreases, consumption of all other commodities remaining same. Let us take an example to illustrate this law. For example, If a person is hungry, the first roti he consumes will have high utility for him as it will give him high level of satisfaction. As he keeps on consuming more and more roties, utility derived from each successive unit will go on decreasing. After a point of time, when person is satisfied, he will not be able to eat more. The utility will drop to zero here. If the consumption of roti is continued further, a person would get negative utility or disutility. This can be illustrated with the help of following table.

No. of Roti	Marginal Utility (MU)
1	10
2	8
3	5
4	3
5	0
6	-2



Law of Diminishing Marginal Utility

It can be noted from the above table and diagram, that the utility of first roti is very high i.e. 10 utils. The utilities of 2nd, 3rd, 4th roti falls to 8, 5 and 3 utils respectively. 5th roti gives zero utility, after which each successive roties starts giving negative utility.

## **Exceptions to the Law/ Limitations of the Law**

The law of Diminishing Marginal utility does not apply in following cases:

- 1) Small initial unit: The law is not applicable when the initial units of commodity are of very small size. For example, drinking water with a spoon. In such cases, initially utility derived from additional units will go on increasing and the law may not operate for sometime. It is only after a stage in consumption is reached that marginal utility begins to diminish.
- 2) Rare and curious things like rare paintings, gold and diamond jewellery: The law does not apply in such cases because collection of more and more units usually give more satisfaction to the collector/consumer.

#### Criticism of the Law

Law of Diminishing Marginal utility has been criticised by modern economists on following grounds:

- 1) Measurement of utility is not possible: The major criticism of this approach is that it is not possible to measure utility in cardinal numbers. Utility is a psychological phenomenon and thus it is not possible to measure it in quantifiable terms. In real life, we can only describe utility of a product in words.
- 2) Marginal utility of money does not remain constant: Cardinal economists believe that marginal utility of money remains constant throughout. However, when a person uses money, stock of money reduces leading to increase in utility of remaining stock.

- 3) Utility is not always independent: Sometimes utility of one commodity is affected by other commodities. Many times, consumer prefers to consume series of related goods. For example, A consumer may prefer to consume biscuits or pakoda along with tea.
- 4) Unrealistic assumptions: The law is based on various unrealistic assumptions. It assumes no change in fashion, taste, income, preferences of a customer. But in real life, environment is extremely dynamic and so are taste, fashion etc. With new products having advanced features being launched so frequently, taste and preferences of customers are also changing frequently. Thus, this law may not operate in present dynamic times, at least not in the same form it was believed to operate, say one century ago.

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