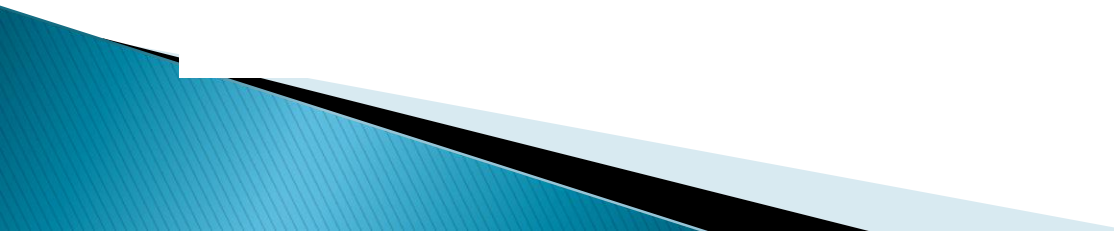


Marginal Utility Theory



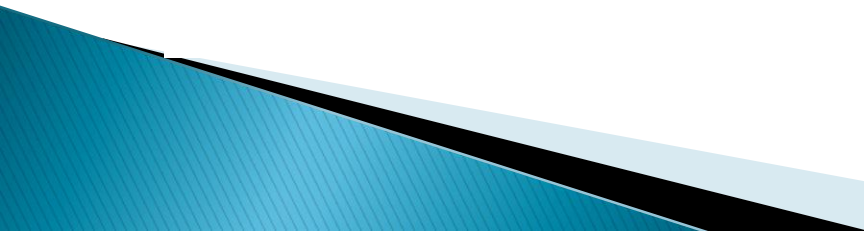
CARDINAL AND ORDINAL UTILITY

Cardinal Utility: The numbers 1, 2, 3, 4 are cardinal numbers. For example the number 2 is twice the size of 1. In the same way, the number 4 is four times the size of number 1.

- Alfred Marshall developed cardinal utility analysis.
 - According to cardinal approach, utility can be measured.
 - **Ordinal utility:** The numbers 1st, 2nd, 3rd, and 4th, are ordinal numbers. These ordinal numbers are ranked or ordered. This ranking does not explain the actual size relation of the numbers. The second one might or might not be twice as big as the first one.
 - Hicks and Allen used ordinal utility approach for analyzing the consumer behavior. This analysis is known as indifference curve analysis.
- 



TYPES OF UTILITY.

- The want satisfying power contained in a good is said to be its utility. In economics the term utility is used to denote the satisfaction or welfare. Utility derived from a good are of different form such as 1) Form utility, 2) Place utility, 3) Time utility, and 4) Service utility.
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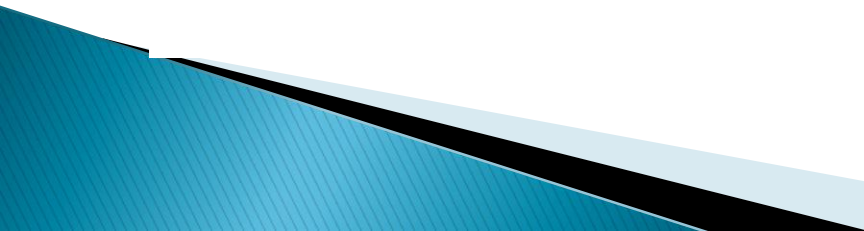


The Law of Diminishing Marginal Utility

1. It is a psychological fact that when a person acquires more and more units of the same commodity during a particular time, the utility he derives from the successive units will diminish. In other words, the additional satisfaction derived from the additional units of a commodity goes on decreasing.
2. H.H Gossen was the first economist to explain the law of diminishing marginal utility, and the law of equi marginal utility in 1854. W.S Jevons named them as Gossen first and second laws of consumption (1871). In 1890 Marshall in his "Principle of Economics" developed this analysis in a refined manner

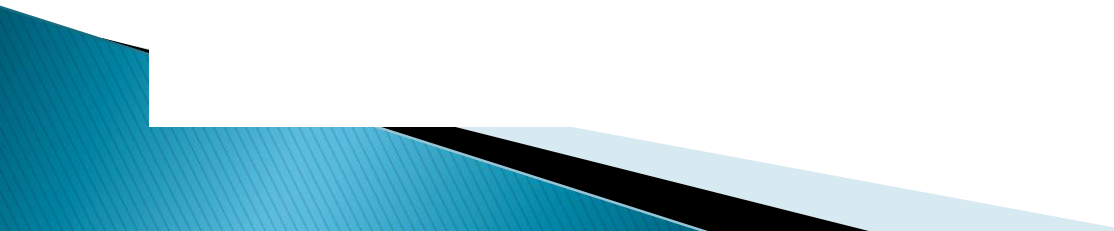


Assumptions of the Law:

- 1.** The law of diminishing marginal utility is based on the cardinal measurement of utility.
 - 2.** Utility is measured in terms of money. The law assumes that the marginal utility of money is constant.
 - 3.** There should not be any time gap between the consumption of one unit and the other unit.
 - 4.** The units of the commodity are homogeneous.
 - 5.** The consumer is assumed to be a rational economic man. He has the knowledge about the market.
- 



Definition of the Law

- Alfred Marshall defines the 'Law of Diminishing Marginal Utility' as "*The additional benefit which a person derives from a given increase of his stock of a thing diminishes with every increase in the stock that he already has.*"
 - In the words of K.E Boulding "*As a consumer increases the consumption of any one commodity, keeping constant the consumption of all other commodities the marginal utility of the variable commodity must eventually decline*"
- 

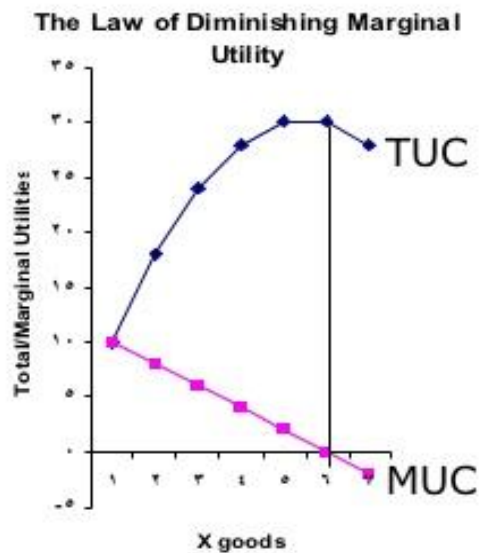


Total and Marginal Utilities

- **Total Utility:** Total utility means the total satisfaction attained by the consumer from all the units of a commodity taken together in the consumption of a certain thing at a time.
- **Marginal Utility:** Marginal utility is the additional utility obtained from an additional unit of any commodity consumed or acquired. It is measured the difference between the utility of the total units of stock of consumption of a given commodity and that of consuming one unit less in the stock considered. In symbolic terms:

$$MU_x = T_{ux} - T_{ux-1}$$

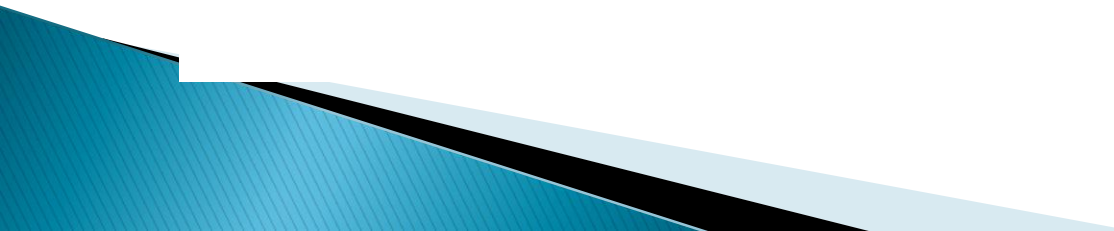

Diagram & Table Explanation



X Units	Total Utility	Marginal Utility
1	10	-
2	18	8
3	24	6
4	28	4
5	30	2
6	30	0
7	28	-2

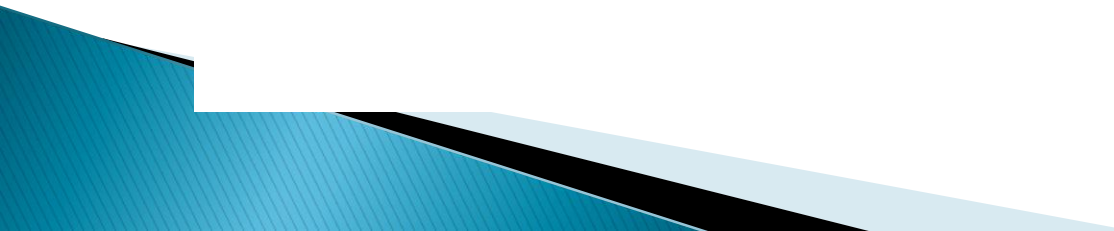


The relationship between total utility and marginal utility

1. When total utility increases at diminishing rate, marginal utility diminishes.
 2. When total utility is maximum, marginal utility becomes zero.
 3. When total utility decreases, marginal utility becomes negative.
- 



Importance of the Law:

1. Useful to Finance Minister.
 2. Basis for the theory of value.
 3. Basis for the Demand and explains the negative slope of demand curve.
 4. Determination of optimum consumption.
 5. Useful in the distribution of wealth.
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Thank you