

## Utility

Meaning: Wants satisfying capacity of goods or services is called Utility.

According to Prof. Waugh:

“Utility is the power of commodity to satisfy human wants.”

### **Characteristics of Utility:**

1. Utility has no Ethical or Moral Significance.
2. Utility is Psychological.
3. Utility is always Individual and Relative.
4. Utility is not Necessarily Equated with Usefulness.
5. Utility cannot be Measured Objectively.
6. Utility Depends on the Intensity of Want.
7. Utility is Different from Pleasure.
8. Utility is also Distinct from Satisfaction.

### **Types of Utility:**

There are following types of utility:

1. Form Utility.
2. Place Utility.
3. Time Utility.
4. Service Utility.

### **Can Utility be Measured?**

Utility is a psychological concept. This is different for different people. Therefore, it cannot be measured directly. Professor Marshall has said that “Utility can be measured and its measuring rod is ‘money. The price which we are ready to pay for an article is practically its price. Nobody will be prepared to pay more than the utility which we derive from the article.

**For example:**

If I am ready to pay Rs. 1500 for a watch and Rs. 2,000 for a Radio. Then I can say that I derive utility from that watch up to the value of Rs. 1500; and from Radio up to the value of Rs. 2,000. “The inference which we can draw from the above example is that the price which we pay for any article is the utility which we derive from that article.” But Prof. Hicks, Allen and Pareto have not supported Marshall’s view of measuring utility.

**They are of this opinion that measuring of utility is not possible because of the following reasons:**

- (i) Utility is personal, psychological and abstract view which cannot be measured like goods.
- (ii) Utility is different for different people. Utility is always changeable and it changes according to time and place. Therefore, it is difficult to measure such thing who is of changeable nature.
- (iii) Further, measuring material ‘money is not static. Value of money always changes, therefore, correct measurement is not possible.

**Kinds of Utility:****Utility are of three kinds:**

- (i) Marginal Utility,
- (ii) Total Utility,
- (iii) Average Utility

**(i) Marginal Utility:****Definition:**

Marginal utility is the utility derived from the last or marginal unit of consumption. It refers to the additional utility derived from an extra unit of the given commodity purchased, acquired or consumed by the consumer .It is the net addition to total utility made by the utility of the additional or extra units of the commodity in its total stock. It has been said—as the last unit in the given total stock of a commodity. According to Prof. Boulding—”The marginal utility of any quantity of a commodity is the increase in total utility which results from a unit increase in its consumption.”

**For example:**

Suppose Mr. Shanker is consuming bread and he takes five breads. By taking first unit he derives utility up to 20; second unit 16; third unit 12; fourth unit 8 and from fifth 2. In this example the marginal unit is fifth bread and the marginal utility derived is 2. If we will consume only four bread then the marginal unit will be fourth bread and utility will be 8.

**Kinds of Marginal Utility—Marginal utility is of three kinds:**

- (i) Positive Marginal Utility.
- (ii) Zero Marginal Utility.
- (iii) Negative Marginal Utility.

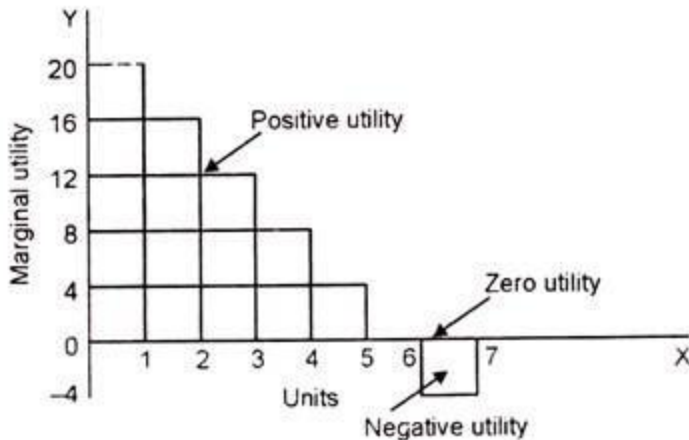
It is a matter of general experience that if a man is consuming a particular goods, then receiving of next unit of goods reduces the utilities of the goods and ultimately a situation comes when the utility given by the goods become zero and if the use of the goods still continues, then the next unit will give dis-utility. In other words it can be said that we will derive “negative utility”.

**This can be studied better by the following table:**

**Marginal Utility Table**

Number of bread	Marginal Utility	Kinds of Marginal Utility
1	20	Positive Utility
2	16	
3	12	
4	8	
5	4	
6	0	Zero Utility
7	- 4	Negative Utility

From the table given above it is clear that up to the consumption of the fifth bread we receive positive utility; 6th unit is the unit of full satisfaction i.e., Utility derive from that unit is zero. From 7th unit the utility received will be negative utility. The table can be represented in shape of diagram as follows: In diagram No. 1 OX axis (line) shows unit of bread and OY line shows the Marginal Utility received. From the figure it is clear that from the first unit of bread utility received are 20 which has been shown on the top of the line.



Similarly 2, 3, 4, 5 Unit of bread's utility is 16, 12, 8, 4 respectively All these have been shown on OX line which shows positive marginal utility. Utility of the sixth bread is zero and that of the seventh bread is negative and negative rectangle has been shown below OX line.

### **Zero Utility:**

When the consumption of a unit of a commodity makes no addition to the total utility, then it is the point of Zero Utility. In our table the total utility, after the 6th unit is consumed. This is the point of Zero Utility. It is thus seen that the total utility is maximum when the Marginal Utility is zero.

### **Negative Utility:**

Negative Utility is that utility where if the consumption of a commodity is carried to excess, then instead of giving any satisfaction, it may cause dissatisfaction. The utility in such cases is negative. In the table given above the marginal utility of the 7th unit is negative.

### **(ii) Total Utility:**

Total Utility is the utility from all units of consumption. According to Mayers—"Total Utility is the sum of the marginal utilities associated with the consumption of the successive units."

### **For example:**

Suppose, a man consumes five breads at a time. He derives from first bread 20 units of satisfaction from 16, from third 12, from fourth 8 and from fifth 4 i.e., total 60 units.

This can be shown by the following table:

**Total Utility Table**

Number of bread	Marginal Utility	Total Utility
1	20	20
2	16	36 = (20 + 16)
3	12	48 = (36 + 12)
4	8	56 = (48 + 8)
5	4	60* = (56 + 4)
	Total = 60*	

**(iii) Average Utility:**

Average Utility is that utility in which the total unit of consumption of goods is divided by number of Total Units. The Quotient is known as Average Utility. For example—If the Total Utility of 4 bread is 40, then the average utility of 3 bread will be 12 if the Total Utility of 3 bread is 36

i.e.  $(36 \div 3 = 12)$ .

The following table will explain the point clearly:

**Average Utility Table**

Unit of Bread	Marginal Utility	Total Utility	Average Utility
1	16	16	16
2	12	$(16 + 12) = 28$	$(28 + 2) = 14$
3	8	$(28 + 8) = 36$	$(36 + 3) = 12$
4	4	$(36 + 4) = 40$	$(40 + 4) = 10$
5	0	$(40 + 0) = 40$	$(40 + 5) = 8$
6	-4	$(40 - 4) = 36$	$(36 + 6) = 6$
7	-8	$(36 - 8) = 28$	$(28 + 7) = 4$

It is clear from the above table that by the increasing use of any article Marginal and Average Utility reduces gradually and Total Utility increases only up to that point where the Marginal Utility comes to zero.

**Relation between Total Utility and Marginal Utility:**

There is a close relationship between Total Utility and Marginal Utility. As there is increase in the unit of a particular commodity, the Marginal Utility goes on diminishing and Total Utility goes on increasing. Total Utility goes on increasing up to that extent till the Marginal Utility becomes Zero. When Marginal Utility is zero Total Utility is maximum.

**After Zero Marginal Utility comes to negative and the result is that Total Utility starts reducing relationship between Total Utility and Marginal Utility can be started as follows:**

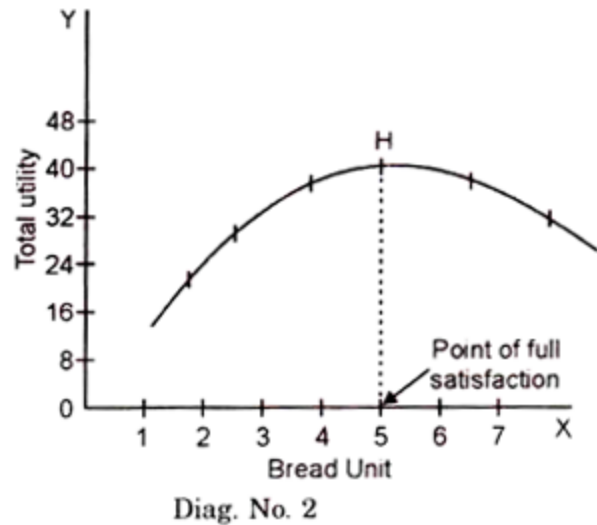
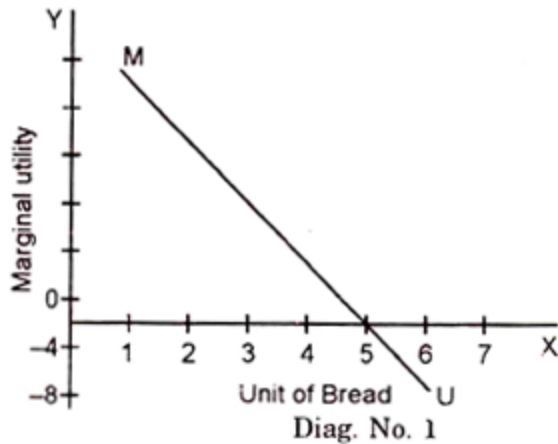
- (i) When Marginal Utility is reducing, the Total Utility will increase so long Marginal Utility does not become zero.
- (ii) When Marginal Utility becomes zero; Total Utility will be maximum.
- (iii) After zero when Marginal Utility is negative then there is reduction in Total Utility.

**Relationship between Marginal Utility and Total Utility can be studied from the following:**

Unit of Bread	Marginal Utility	Total Utility
1	16	16
2	12	(16 + 12) = 28
3	8	(28 + 8) = 36
4	4	(36 + 4) = 40
5	0	(40 + 0) = 40
6	-4	(40 - 4) = 36
7	-8	(36 - 8) = 28

From the above table it is clear that up to fourth bread Marginal Utility is positive and there is no regular increase in the Total Utility. And on fifth bread the Marginal Utility is zero and on this point the increase in Total Utility stops. This is point of safety. As Prof. Bounding has said that “Point of full satisfaction and point of full safety is that point where consumption increases but there is no increase in Total Utility.” If after fifth bread, extra bread is consumed then there will be dis-utility and Marginal Utility will be negative. Sixth and seventh bread shows dis-utility.

**The relationship between Marginal Utility and Total Utility will be shown by diagram as follows:**



In both the diagrams OX line shows bread. In diagram No. 1 OY line shows Marginal Utility and in diagram No. 2 OY line shows Total Utility. As the number of bread increases Marginal Utility goes on diminishing and Total Utility goes on increasing—To remember:

- (1) Marginal Utility goes on diminishing with the consumption of every additional unit of bread.
- (2) Total Utility goes on increasing with the consumption of every additional unit but at a diminishing rate.
- (3) Marginal Utility is equal to the increase in the Total Utility. Total Utility is the sum total of the Marginal Utilities derived from all the units consumed.
- (4) When Marginal Utility becomes 0, total utility does not increase.
- (5) When Marginal Utility becomes negative, Total Utility decreases.
- (6) Increase in Total Utility depends on Marginal Utility.
- (7) Since Marginal Utility diminishes, Total Utility increases at a diminishing rate.
- (8) When Marginal Utility is Zero, Total Utility is maximum.
- (9) When Marginal Utility is negative, Total Utility declines.

