

PRINCIPLES OF ECONOMICS

Lecture 17 UTILITY AND LAW OF DIMINISHING MARGINAL UTILITY
September, 2015



TOPICS TO BE DISCUSSED

1. UTILITY: Meaning

- Total Utility
- Marginal Utility
- Zero Marginal Utility
- Negative Marginal Utility

2. Law of Diminishing Utility

UTILITY

- Want satisfying power of a good/product.
- Utility is a subjective phenomenon
- Utility is not essentially useful and is independent of morality

CONCEPTS OF UTILITY

- **Total Utility-** aggregate utility/satisfaction obtained from the consumption of different units of a commodity/product

$$\text{TU} = \text{Summation of MU}$$

- **Marginal Utility-** addition made to total utility due to the consumption of one additional/extra unit of a commodity/product

$$\text{MU} = \Delta \text{TU} / \Delta Q$$

Or

$$\text{MU}_n = T_n - T_{n-1}$$

MARGINAL UTILITY

- **Positive-** when total utility goes on increasing with the consumption of each additional unit of commodity
- **Zero-** when total utility does not change with the consumption of each additional unit of commodity
- **Negative-** when total utility falls with the consumption of each additional unit of commodity/product

CONCEPTS OF UTILITY

QUANTITY	TOTAL UTILITY	MARGINAL UTILITY	DESCRIPTION
0	0	-	
1	8	8	INITIAL
2	14	6	
3	18	4	POSITIVE
4	20	2	
5	20	0	ZERO
6	18	-2	NEGATIVE

LAW OF DIMINISHING MARGINAL UTILITY

According to Samuelson, “As the amount consumed of a good increases, the marginal utility of the good tends to decrease”.

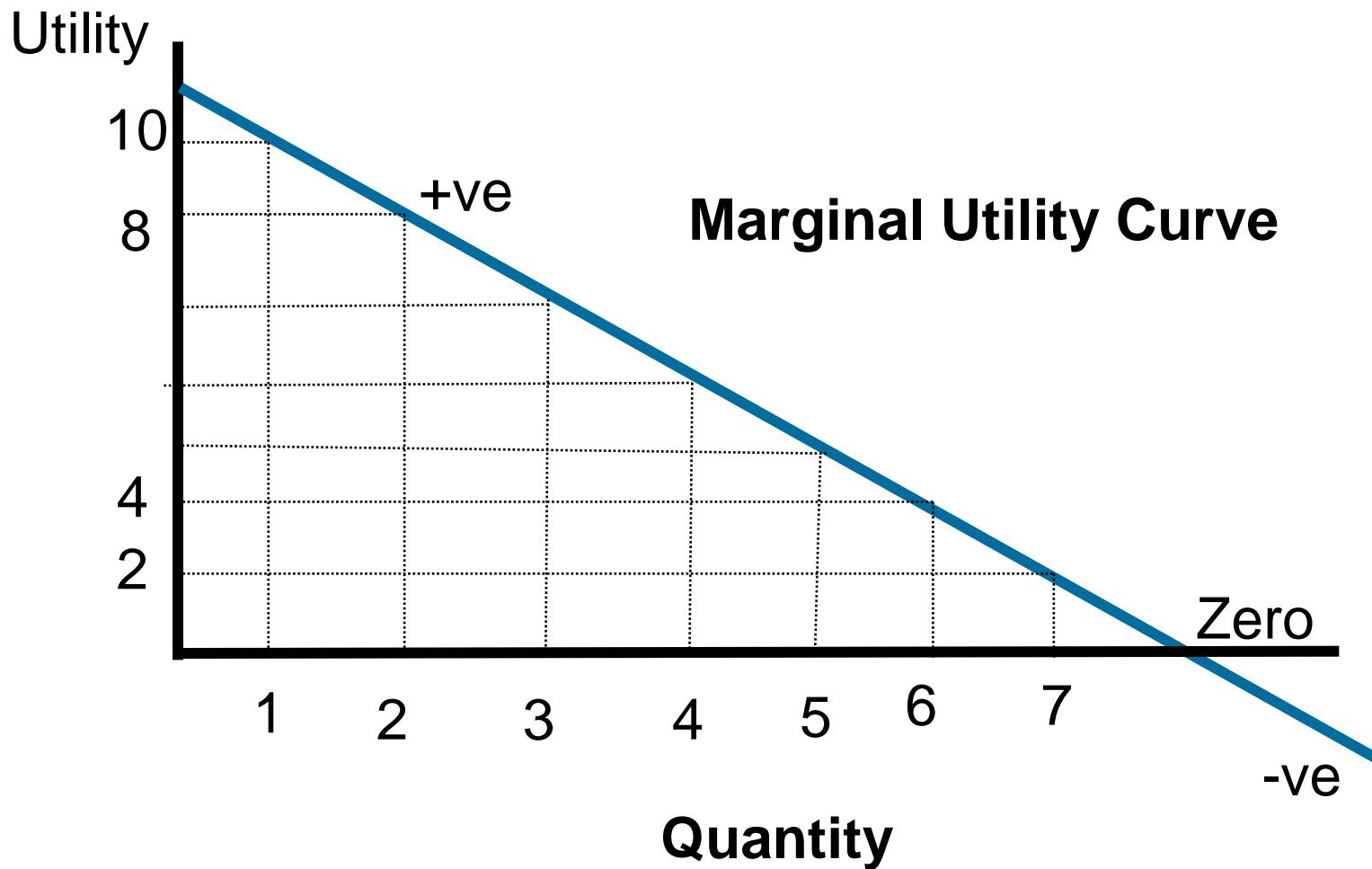
Assumptions of the Law:

- Utility can be measured in cardinal numbers
- There is no change in income of the consumers
- No change in prices of substitutes/complimentary goods
- Taste and preferences remain the same
- Marginal utility of money remains the same

LAW OF DIMINISHING MARGINAL UTILITY

No. of Burgers	MARGINAL UTILITY
1	4
2	3
3	2
4	1
5	0
6	-1

LAW OF DIMINISHING MARGINAL UTILITY



CONCLUSION

- As we consume more and more quantity of a product, marginal utility goes on diminishing
- Price of the commodity is always equal to its marginal utility
- As such, consumer will buy more units of a commodity only if its price goes down

Thank You 😊