

Economics

Year 1

SECTION

3

UTILITY



CONSUMERS' RATIONAL DECISION-MAKING

Consumer Behaviour

INTRODUCTION

This section covers consumers' behaviour. It explains what utility is, how the concept of utility is related to the behaviour of the consumer. The section guides you to know how the concept of utility applies to your own daily activities in decision making. The section also highlights how the concept of utility guides consumers to make decision about how to manage limited resources. A consumer refers to the person who buys and make use of a commodity. The consumer will buy a commodity because they get satisfaction from it. The law of diminishing marginal utility can help not only the consumer but also enable business owners to know the behaviour of buyers. This will help producers to develop the best approach to sell more goods and services to consumers.

At the end of this section, you should be able to:

- Understand how the concept of utility applies to real life activities.
- Explain how the law of diminishing marginal utility applies in our every- day lives.

Key Ideas

- Utility is the satisfaction consumers derive from using a commodity. Consumers spend their resources (eg. money) on goods and services because they get satisfaction from consuming them.
- Utility applies to your everyday life; your choice of mobile phone, and the kind of food you buy. As a consumer, you will buy more of a commodity when your utility is high and buy less when your utility is low.
- Utility from additional unit of a commodity consumed reduces. Therefore, you should expect that, as you consume more of a commodity, your utility marginal will reduce. This idea of marginal utility means that there is a limit to the quantity (units) you can consume.

THE CONCEPT OF UTILITY

Let us read this story that explains the concept of utility.

Individual consumers go to the market to buy goods and services. They derive a kind of enjoyment or pleasure (satisfaction) when they make use of the commodity. You watch movies and derive some happiness in the form of entertainment from it. You also buy food and eat to derive satisfaction; you drink water to derive satisfaction and some people use air conditioners in their rooms and offices to derive enjoyment in the form of cool temperature. After consumption, consumers rank their level of satisfaction as; highly satisfied, satisfied, and not satisfied. The satisfaction or pleasure that a consumer derives from using a commodity is known as utility.



Figure 3.1: People Enjoying Their Food, Water and Drink.

Utility: *This is the satisfaction that buyers derive from consuming or using a particular commodity.*

Different consumers have different levels of utility when they consume the same commodity. For example, two people who watch the same movie at the same time may enjoy it differently. One will have a higher satisfaction while the other will have a lower satisfaction. Consumers will buy a commodity that will give them higher satisfaction. For instance, if there are two commodities that give different levels of satisfaction, an individual consumer will buy the commodity that will give higher satisfaction.

Rational consumers measure the utility they derive against the money spent to buy the commodity. They take into consideration the level of utility they will gain from spending their resources (money). They will therefore buy more quantities when utility is high, but they will buy fewer quantities when utility is low. This means that when price is high, consumers will derive lower satisfaction from spending their money. They will therefore buy fewer quantities. On the other hand, when price is low, they will derive higher satisfaction from spending their money. They will buy more quantities.

The knowledge in the concept of utility also helps business to know the strategies they can use to influence demand for their products. They will produce more of those commodities that have high marginal utilities so as to attract more buyer. Utility concept therefore serves as a guide to individuals and businesses on how to take decisions in the management of limited resources to achieve highest satisfaction.

Activity 3.1

Drink a sachet of water each and rank your level of satisfaction derived from the water, with 0 being the least while 5 being the highest. Now use your ranking to explain the concepts of utility.

Activity 3.2

List the kind of food you often buy at the school canteen and explain to the class about how that food you consume is related to the concept of utility.

Activity 3.3

Apart from food and water, list any two items: one that gives you high satisfaction and one item that gives you lower satisfaction and state how often you buy them.

THE LAW OF DIMINISHING MARGINAL UTILITY

Read the following story about utility.

A person is feeling thirsty, so they bought oranges and started eating them. Because they were very thirsty, the first orange will give them very high satisfaction. The 2nd may give less satisfaction than the first because their level of thirst has been reduced after taking in the first unit. As the person consumes more and more oranges, the satisfaction gained from each additional orange consumed will reduce.

The level of satisfaction that they derived from each additional orange consumed is their marginal utility.

Marginal utility is therefore the additional satisfaction that a consumer derives from one additional unit of a commodity consumed.

From our story above, you will see that as the person consumes more units of the oranges, the marginal utility of the oranges falls.

Table 3.1: Utility schedule.

Quantity of oranges	Marginal utility	Total utility
1	10	10
2	7	17
3	3	20
4	0	20
5	-2	18

The **table 3.1** above shows a relationship between quantity and utility. The first column represents quantities, second column represents marginal utility and the third column represents total utility. You can see that, as quantity increases from 1 through to 5 units, marginal utility also decreases from 10 to -2. The cumulative value of total utility (in the third column) is worked out by adding marginal utility to the previous total utility or by add up the marginal utility at various quantity levels.

The utility table (data) above is presented on a graph below as utility curves. It is drawn with the y-axis representing utility and the x-axis representing quantity consumed. The upper curve shows total utility which increases as more units are consumed. The lower curve shows marginal utility, which falls continuously as quantity consumed increases.

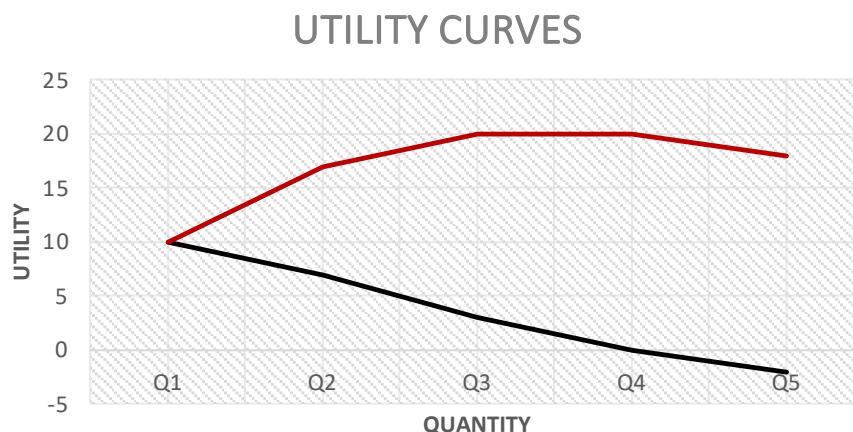


Figure 3.2: Utility curves

The law of diminishing marginal utility states that, all other things being equal, as more and more units of a particular commodity are consumed, marginal utility will fall.

This law is directly related to the level of demand. Consumers will compare the marginal utility to the price they pay. A rational consumer will buy a commodity only when their marginal utility is at least equal to the price. As more units are consumed marginal utility will fall and as such, consumers will want to pay lower prices for any extra unit consumed. This means that when price decreases, quantity demanded will increase and when price increases, quantity demanded will decrease.

The law also shows that there is a limit to the quantity that a person will consume. Too much of a product means marginal utility may fall to zero level. Beyond that limit, additional units consumed will give dissatisfaction.

For the producers sell more, they will have to produce goods and services that will have higher marginal utility.

Activity 3.4

- 1.** Drink some sachets of water one after the other.
 - a.** Indicate the quantity of sachets of water you were able to drink.
 - b.** Give reason(s) why you could not continue drinking sachets of water after some time.
 - c.** Explain to a friend, how your satisfaction derived from the drinking the sachets of water, relates to the concept of diminishing marginal utility.

Activity 3.5

1. Visit your local market with a friend and look at people buying fresh fruit and vegetables. Write down the quantities and weights they are buying. Do people buy enough mangoes, oranges or watermelon for that day or to last the month? What satisfaction do buyers in the market get from the fruit and vegetables they buy? What things might affect their satisfaction? Explain how the law of diminishing marginal utility can be applied to buying fresh fruit and vegetables.

Review Questions on Utility

- 1.** What is utility and how will you use the concept to describe consumers decision making?
- 2.** Identify the kind of utilities (satisfaction) you will derive from the following activities
 - a.** Taking your prescribed medication during illness.
 - b.** Watching a movie
 - c.** Attending a birthday party of a friend
 - d.** Taking part in economics lessons at your class
- 3.** Using your experiences at home and in school, explain the law of diminishing marginal utility

EXTENDED READING

- https://economictimes.indiatimes.com/definition/utility#amp_tf=From%20%251%24s&aoh=17246076684459&referrer=https%3A%2F%2Fwww.google.com
- https://youtu.be/YhqqWKw_OGs?si=ST-2_R1E8Ipid5E
- Utility in Economics Explained: Types and Measurement (investopedia.com)

REFERENCES

- **Baye, M.R. (2010).** Microeconomics and business strategy. New York, NY: McGraw-Hill Irwin
- Sean Ross (Dec 2020). “What does the law of diminishing marginal utility explain.”

GLOSSARY

WORD	MEANING
Diminishing:	the process of becoming less or reducing in value, size or effectiveness over a period of time
Goods:	these are physically produced object for which demand exists by transferring ownership from one person to another in a market. Eg books, clothing, food stuffs etc.
Marginal:	The additional change or effect that results from a unit change (increase or decrease) in one variable.
Rational consumer:	A buyer who make wise use of his income to gain higher satisfaction.
Satisfaction:	this is the good feeling that is gained from a using a commodity
Services:	intangible activities of which consumers purchase to derive satisfaction but do not result in acquisition of any physical thing.

ACKNOWLEDGEMENTS



Ghana Education
Service (GES)



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